

Autumn 2024

Report

Water Services Strategic Plan 2050

Natura Impact Statement



Safeguarding our water for our future

If you have any questions or need more information please contact us:

Contact details

Web:

www.water.ie

Twitter:

@IWCare

Uisce Éireann

PO Box 860

South City Delivery Office

Cork City

Consultation inquiries or feedback

9am–5.30pm, Mon–Fri

Email:

wssp@water.ie

Post:

Water Services Strategic Plan, Uisce Éireann,
P.O. Box 13216, Glenageary, Co. Dublin

Freephone:

1800 46 36 76

Executive Summary

This is the Natura Impact Statement (NIS) in support of the Appropriate Assessment (AA) for Uisce Éireann's Water Services Strategic Plan (WSSP) 2050. The preparation of this NIS complies with the requirements of Article 6, and in particular, the provisions of Article 6(3), of the Habitats Directive (92/43/EEC) in that it provides information and assessment of the implications for European sites from the WSSP 2050.

The WSSP 2050 presents Uisce Éireann's objectives to 2050 aligned to their vision *"A sustainable Ireland where water is respected and protected, for the planet and all the lives it supports"*. The four strategic objectives have a series of strategic aims which address each component of the services Uisce Éireann provides and associated with these are 35 actions which outline the programme of work to be delivered.

Screening for AA of the Draft WSSP 2050 indicated that the potential for likely significant effects (LSEs) on European Sites could not be excluded and that the Draft WSSP 2050 would undergo AA. Given the nature of the plan, all European Sites within the island of Ireland would be brought forward to AA and an NIS prepared to fully inform the AA of the Draft WSSP 2050 by the Competent Authority.

The NIS for the Draft WSSP 2050 was issued for public consultation and all comments and submissions received were reviewed. Material changes were required to the assessment in the NIS in response to the consultation which resulted in changes to actions of the WSSP 2050.

This NIS details the potential for the WSSP 2050 to affect the integrity of European Sites taking into account the potential for in-combination effects with other plans and programmes.

The NIS identified that the general activities of Uisce Éireann – water supply and wastewater treatment – could have a range of specific activities which might have impacts including, but not limited to, species mortality, habitat loss and/or fragmentation, barrier effects, disturbance, water quality, hydrology, and the transfer of non-native species. These could result in direct and/or indirect impacts on European Sites, including transboundary effects.

Mitigation measures and key principles for protecting European Sites were identified within this NIS and any lower tier plans and projects arising from the WSSP 2050 would be required to adhere to these. These measures comprised relevant lower tier projects and plans arising from the implementation of the WSSP 2050, and would be subject to Screening for AA/AA where appropriate.

It was concluded that, with these mitigation measures and key principles in place, the WSSP 2050 would have no adverse effects on the integrity of any European Site(s), either alone or in-combination with other plans or programmes.



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1 Introduction and Background

1.1 Background to Uisce Éireann

Uisce Éireann (UÉ), as Ireland's national public water services provider, supplies 1.7 billion litres of drinking water to their customers (households and businesses) every day and collects and treats more than 1.2 billion litres of wastewater before safely returning it to the environment. Through the provision of safe, secure and sustainable water services, UÉ plays a central role in enabling economic growth and protecting both the environment and the health and safety of customers and communities across Ireland.

Uisce Éireann's purpose is:

We rise to the challenge of delivering transformative water services that enable communities to thrive.

Uisce Éireann's vision is for:

A sustainable Ireland where water is respected and protected, for the planet and all the lives it supports.

Uisce Éireann is responsible for the operation of all public water and wastewater services including:

- Management of national water and wastewater assets
- Maintenance of the water and wastewater system
- Investment and planning
- Managing capital projects
- Customer care and billing

In discharging their role as the national water services utility, responsible for water services operations and investment, UÉ is regulated by:

- The economic regulator, the [Commission for Regulation of Utilities \(CRU\)](#) which is charged with protecting the interests of the customer, while approving an appropriate funding requirement sufficient to enable the utility to deliver the required services to specified standards in an efficient manner; and
- The environmental regulator, the [Environmental Protection Agency \(EPA\)](#), which sets standards and enforces compliance with EU and National Regulations for drinking water supply and wastewater discharge to water bodies. The EPA liaises with the Health Services Executive in matters of public health.

1.2 The Water Services Strategic Plan 2050

1.2.1 Purpose

The Water Services Strategic Plan 2050 (WSSP 2050) is UÉ's long-term strategic plan, which UÉ is required to prepare under the Water Services No. 2 Act 2013. It sets out UÉ's objectives and the means by which they will aim to achieve them in the context of the significant challenges they are likely to face over the next 25 years to 2050. The plan outlines UÉ's strategic direction and the actions they will implement to ensure sustainable water services for Ireland.

The WSSP is one of a suite of plans and policy documents guiding the delivery of water and wastewater services in Ireland:

- The **Water Framework Directive (WFD)** is the overarching Directive relating to water policy in the European Union (EU). It aims to protect and restore the water environment so that all water bodies are at 'Good Ecological Status' or better.
- The **Drinking Water Directive (DWD)** is the EU's main law on drinking water. It concerns the access to, and the quality of water intended for human consumption to protect human health.
- The **Urban Wastewater Treatment Directive (UWWTD)** aims to protect human health and the environment through obligations for collection and treatment of urban wastewater.
- The **Water Services Policy Statement (WSPS)** sets out the priorities of Government regarding the provision of water services during the period specified in the statement¹.

The WSSP 2050 will guide the development of implementation plans and programmes. The relationship of the WSSP 2050 (Tier 1) to the (Tier 2) implementation plans, and the future (Tier 3) projects and programmes is illustrated in Diagram 1-1.

¹ The Water Services Policy Statement 2024 – 2030 was published in February 2024.

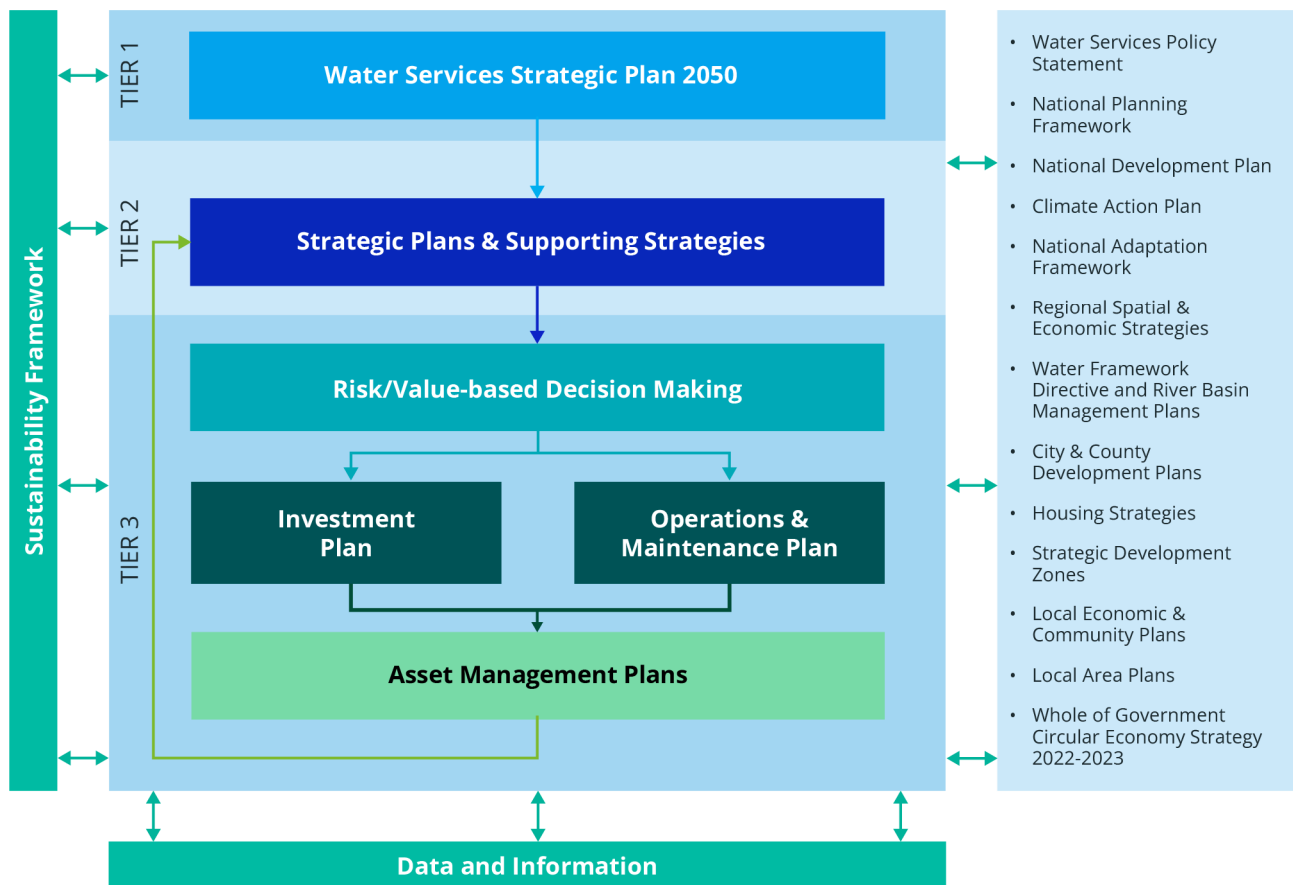


Diagram 1-1: Interaction of Plans and Projects

1.2.2 WSSP Legislative Context

UÉ work within the legal context of the Water Services Acts 2007 to 2022. The following is particularly relevant to preparing the WSSP:

Water Services Act 2013

A WSSP is required to be prepared under the Water Services (No. 2) Act 2013 (as amended) (the Water Services Act). It must state the objectives of UÉ over a 25-year horizon and the means by which it proposes to achieve those objectives covering:

- Drinking water quality.
- Prevention or abatement of risk to human health or environment relating to the provision of water services.
- Existing and projected demand for water services.
- Existing and planned arrangements for provisions of water services.
- Existing and reasonably foreseeable deficiencies in the provision of water services.
- Existing and planned water conservation measures.
- Management of the property of UÉ.

The Water Services Act requires that UÉ consult with the CRU, the EPA, each local authority and each regional body in advance of preparing a new WSSP. The legislation also states that the WSSP shall be consistent, as far as is practical, with:

- The National Planning Framework.
- Regional Planning Guidelines.
- Any river basin management plan in force at the time.

The WSSP must have regard to, inter alia, proper planning and sustainable development at a county and local level. It is also subject to the SEA Directive (see Section 1.5), the Birds Directive and the Habitats Directive (see below).

1.3 Legislative Context

The EU Habitats Directive provides legal protection for habitats and species of European importance. Articles 3 to 9 provide the legislative means to protect habitats and species of community interest through the establishment and conservation of an EU-wide network of sites known as the Natura 2000 network (hereafter referred to as European Sites). European Sites comprise Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). SPAs are designated as a result of the implementation of the Birds Directive. Candidate SACs (cSACs) and proposed SPAs (pSPAs) are afforded the same protection as SACs and SPAs.

Articles 6(3) and 6(4) of the EU Habitats Directive set out the decision-making tests for plans and projects likely to affect European Sites. The first step of the AA process is to carry out a Screening to establish whether, in relation to a particular plan or project, an AA is required.

AA is a process for undertaking a focused impact assessment of a plan or project, examining its implications, on its own or in-combination with other plans and projects, on one or more European Site(s) in view of the sites' conservation objectives, as referred to in Article 6(3) of the EU Habitats Directive.

Article 6(3) established the requirement for AA:

"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to Appropriate Assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."

Article 6(4) states:

"If, in spite of a negative assessment of the implications for the [Natura 2000] site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, Member States shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted."

A screening for AA of the Draft WSSP 2050 in line with the requirements of Article 6(3) of the EU Habitats Directive has been undertaken (see Section 1.6) which concluded that an AA of the Draft WSSP 2050 would be required.

1.4 Public Authorities and AA

The duties of public authorities in relation to nature conservation are laid out principally in Article 27 of the S.I. No. 477/2011 – European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) (hereafter referred to as the Habitats Regulations 2011). Uisce Éireann is defined as a 'public authority' for the purposes of the 2011 Regulations.

The first step of the AA process is to carry out a screening to establish whether, in relation to a particular plan or project, if there is potential for likely significant effects (LSEs) to any European Site(s). Specifically, Regulation 42(1) states:

"A screening for Appropriate Assessment of a plan or project for which an application for consent is received, or which a public authority wishes to undertake or adopt, and which is not directly connected with or necessary to the management of the site as a European Site, shall be carried out by the public authority to assess, in view of best scientific knowledge and in view of the conservation objectives of the site, if that plan or project, individually or in combination with other plans or projects is likely to have a significant effect on the European Site."

Regulation 42(6) states that:

"The public authority shall determine that an Appropriate Assessment of a plan or project is required where the plan or project is not directly connected with or necessary to the management of the site as a European Site and if it cannot be excluded, on the basis of objective scientific information following screening under this Regulation, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European Site"

In the context of Article 6(3), Uisce Éireann must carry out screening for AA of the Draft WSSP 2050 to assess whether, on the basis of objective scientific information, the plan individually or in-combination with other plans or projects, is likely to have a significant effect on a European Site. If this screening determines that it cannot be excluded, on the basis of objective scientific information, that the Plan, individually or in-combination with other plans or projects, will have a significant effect on a European Site, then Uisce Éireann must determine that an Appropriate Assessment of the plan is required.

To assist UÉ in carrying out any Appropriate Assessment that may be required following screening, UÉ must prepare a Natura Impact Statement (NIS), which is a report comprising the scientific examination of a plan or project and the relevant European Site or European Sites, to identify and characterise any possible implications of the plan or project individually or in combination with other plans or projects in view of the conservation objectives of the site or sites, and any further information including, but not limited to, any plans, maps or drawings, scientific information or data required to enable the carrying out of an Appropriate Assessment.

In carrying out the full AA, the Habitats Regulations 2011 require UÉ to take into account:

- The NIS;
- Any other plans or projects that may, in-combination with the plan or project under consideration, adversely affect the integrity of a European Site;
- Any supplemental information furnished in relation to any such report or statement;
- If appropriate, any additional information furnished in relation to the NIS;
- Any information or advice obtained by UÉ;
- If appropriate, any written submissions or observations made to UÉ in relation to the application for consent for the Plan; and
- Any other relevant information.

Following the Appropriate Assessment process, UÉ must then only adopt the Plan after having determined that the Plan shall not adversely affect the integrity of any European Site(s).

Additionally, under Regulation 42(9c) of the Habitats Regulations UÉ must:

"Submit a Natura Impact Statement together with evidence compiled under subparagraph (b) to the Minister not later than six weeks before it proposes to adopt or undertake the plan or project to which the Natura Impact Statement and evidence relates."

Furthermore, under Regulation 49(10) UÉ must determine whether the WSSP 2050 would adversely affect the integrity of a European site *before* a decision is taken to approve and adopt the plan.

1.5 Overlap with Strategic Environmental Assessment (SEA)

The SEA process involves assessing the significant effects on the environment of implementing the Draft WSSP 2050 and considering reasonable alternatives for achieving its objectives. Combined and cumulative effects of the Draft WSSP 2050 as a whole and with other plans and programmes are also included as part of the assessment. The first stage in the SEA process is the screening stage, to consider whether SEA is required. As per the SEA Screening Report² it was determined that the Draft WSSP 2050 is of a type that falls within the remit of the SEA Directive/SEA Regulations and requires mandatory SEA. Therefore, the Draft WSSP 2050 was taken forward to the SEA Scoping stage including statutory consultation with the designated environmental authorities.

This helped inform the SEA Environmental Report which will be published alongside the Draft WSSP 2050 for public consultation. The SEA Environmental Report and consultation responses are also required to be taken into account in finalising the Draft WSSP 2050 and for monitoring its implementation.

1.6 Summary of Stage 1 AA Screening

The AA Screening Report determined that UÉ as a public authority under the Habitat Regulations 2011 (as amended) are required to screen all of their plans and projects. The Draft WSSP 2050 was therefore subject to the requirements of the Habitats Regulations and as such UÉ were required to assess the implications of the Draft WSSP 2050 on relevant European Sites in view of the sites' conservation objectives.

The report concluded that the Draft WSSP 2050 is not directly connected to or necessary to the management of any European Site. It further concluded that given the strategic nature of the Draft WSSP 2050 and the current stage of preparation, that there was potential for likely significant effects on one or more European Sites, in view of the sites' conservation objectives. Furthermore, it was concluded that all European Sites across Ireland and Northern Ireland should be screened in.

In the absence of more detailed information on the Draft WSSP 2050 the precautionary principle was applied. Therefore, in accordance with Article 6(3) of the Habitats Directive, it was determined that a Stage 2 AA of the Draft WSSP 2050 would be required. For further details see Section 5; the full screening report can be found in Appendix A.

1.7 Consultation

1.7.1 Consultation Process

The Draft WSSP 2050 will be developed following two phases of consultation. An initial statutory consultation was undertaken in Autumn 2023 on the WSSP Issues Paper, SEA Scoping Report (as indicated above) and the AA Screening Report. For this period of consultation, UÉ engaged directly with key statutory and regulatory stakeholders. Feedback received on the Issues Paper and the SEA Scoping Report and the AA Screening Report, were reviewed and taken into account as the Draft WSSP 2050, SEA Environmental Report and NIS were prepared.

As part of the second phase of consultation, UÉ carried out a public consultation on the Draft WSSP 2050 together with the SEA Environmental Report and the NIS (AA process) in Spring 2024.

² Appended to the SEA Scoping Report, <https://www.water.ie/projects/strategic-plans/water-services-strategic/>

1.7.2 Responses from the First Phase of Consultation

Responses from the first phase of consultation relevant to this NIS are provided in Appendix B. A summary of those where comments relevant to the NIS is provided below.

The **Environment Protection Agency** advised that all recommendations from the SEA and AA processes, including mitigation measures and monitoring proposals, should be integrated into the Plan.

Inland Fisheries Ireland (IFI) stated that some general issues and likely significant effects that IFI had highlighted in the past had been rightly identified in the SEA scoping and AA Screening reports.

The **Northern Ireland Environment Agency** (NIEA), Natural Environment Division (NED) listed commented on terminology with respect to the network of European protected sites in Northern Ireland as a result of the United Kingdom's decision to leave the EU. The organisation also provided a list of legislative instruments and policy statements/strategies that might be considered, and relevant web links. The NED also stated that AAs should refer to the status of habitats and species in the relevant reports available on the Joint Nature Conservation Committee (JNCC) website.

The NIEA Inland Fisheries branch advised that any SEA/AA be cognisant of the North Atlantic Salmon Conservation Organisation (NASCO), Convention for the Conservation of Salmon in the North Atlantic Implementation Plan for the period 2019 – 2024 in relation to transboundary effects.

The Department of Agriculture, Environment and Rural Affairs (DAERA) Marine Conservation Branch advised that there are now 18 SPAs in Northern Ireland – the East Coast Marine proposed (p)SPA and Carlingford Marine pSPA also need to be considered. They also advised that changes in hydrology can change the movement of sediment, therefore, potentially change coastal processes which could impact reliant habitats and species. In addition, they also advised considering how the introduction and spread of invasive non-native species can be prevented/minimise, and that extreme noise disturbance can also cause species mortality.

1.7.3 Responses from the Second Phase of Consultation

Responses from the second phase of consultation relevant to this NIS are provided in the Consultation Report (Uisce Éireann, 2024). A summary of those where comments relevant to the NIS is provided below.

The **Department of Housing, Local Government and Heritage (DHLGH)** advised that the legislative requirement to consult with the Minister should be clearly outlined within Section 1.4 of the NIS. They also advised that mitigation measures should be included whereby there is a commitment to prepare comprehensive risk assessments, contingency plans and incident response procedures to ensure pollution threats can be eliminated at both existing and any planned new sites operated by UÉ. This will include sites that are within, adjacent to, ecologically or hydrologically linked to European sites.

The **IFI** noted that discharges from Drinking Water Treatment Plants require consideration and be added as a specific activity causing likely significant impacts in the absence of mitigation.

The **Local Authority Water Programme (LAWPRO)** requested that the requirements of “high-status objective waters or Blue Dots” are acknowledged in all documents to reflect the *“sensitivity of these waters and the higher standards required in terms of wastewater discharges.”* LAWPRO also recommended a commitment to resolving all pressures on HSO waters, which will also in turn support protect habitats and species with a high-status requirement. They further pointed out that an updated list of high-status sites is available on the EPAs Geoportal.

NED (NIEA-DAERA) requested that Ramsar sites be included in the NIS. NED also requested that should there be any changes to the current plan which results in the potential for transboundary impacts, *“then the relevant authorities in NI should be consulted.”* NED further suggested that wording in certain sections be adjusted and recommended the inclusion of additional plans within the in-combination assessment,

In addition, consultation responses on the Draft WSSP 20250 have resulted in changes to some of the aims of the Plan.



2 Approach and Assessment Methodology

2.1 Stages in the AA Process

In-line with the following European Union (EU) guidance 'Assessment of Plans and Projects in Relation to Natura 2000 Sites – Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC' (EC, 2021), the AA process can be broken down into four stages:

- Stage 1: Screening for AA/Test of Likely Significant Effects.
- Stage 2: Appropriate Assessment.
- Stage 3: Alternative Solutions.
- Stage 4: Reasons of Overriding Public Interest (IROPI).

Stage 1: Screening for AA/Test of Likely Significant Effects

Stage 1 identifies whether a plan or project, alone or in-combination with other plans and projects, is likely to have significant effects on a European Site. If the effects are deemed to be significant, potentially significant, or uncertain, or if the screening process becomes overly complicated, then the process must proceed to Stage 2 (AA). Screening should be undertaken without the inclusion of mitigation.

As the mere possibility of there being a significant effect on the site will trigger the need for an Appropriate Assessment, this decision can be taken either after a thorough examination of the plan or project, or on the basis of a simple analysis where it is already anticipated that there are likely to be significant effects (due to the type, size or scale of the plan or project, the characteristics of the European Site or because of a high risk of combined effects with other plans or projects). This will enable the Appropriate Assessment to start as soon as possible (EC, 2021).

Stage 2: AA

Stage 2 assesses whether the plan or project, alone or in-combination with other projects or plans, will have adverse effects on the integrity of a European Site, and includes any mitigation measures necessary to avoid negative effects.

Stage 3: Alternative Solutions

Stage 3 examines any alternative solutions or options that could enable the plan or project to proceed without adverse effects on the integrity of a European Site.

Stage 4: Reasons of overriding public interest (IROPI)

Stage 4 examines whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project that will have adverse effects on the integrity of a European Site to proceed in cases where it has been established that no less damaging alternative solution exists. Compensatory measures must be proposed and assessed, and the Commission must be informed of the compensatory measures.

Compensatory measures must be practical, implementable, likely to succeed, proportionate and enforceable, and they must be approved by the Minister.

Not all stages of the process will be required in all cases.

2.2 Guidance Documents and Information Sources

Guidance Documents

The preparation of this NIS/AA has taken account of guidance contained in the following documents:

- Appropriate Assessment Screening for Development Management. Office of the Planning Regulator (OPR) Practice Note PN01 (2021).
- AA of Plans and Projects in Ireland: Guidance for Planning Authorities. DoEHLG (2010).
- Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission (2021).
- Communication from the Commission on the Precautionary Principle. European Commission (2000).
- Guidance Document on Article 6(4) of the 'Habitats Directive' 92/43/EEC. Clarification of the concepts of: Alternative Solutions, Imperative Reasons of Overriding Public Interest, Compensatory Measures, Overall Coherence, Opinion of the Commission. European Commission (2007).
- Guidance document on Assessment of plans and projects in relation to Natura 2000 sites, A summary. European Union, 2022,
- Marine Natura Impacts Statements in Irish Special Areas of Conservation. A working Document. Department of Arts, Heritage & the Gaeltacht (DAHG) (2012).
- Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. European Commission (2018).

Departmental/National Parks and Wildlife Services (NPWS) Circulars

- AA under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPWS 1/10 and PSSP 2/10.
- AA of Land Use Plans. Circular Letter SEA 1/08 & NPWS 1/08.
- Compliance Conditions in respect of Developments requiring (1) Environmental Impact Assessment (EIA); or (2) having potential impacts on Natura 2000 sites. Circular Letter PD 2/07 and NPWS 1/07.
- Guidance on Compliance with Regulation 23 of the Habitats Directive. Circular Letter NPWS 2/07.
- Water Services Investment and Rural Water Programmes – Protection of Natural Heritage and National Monuments. Circular L8/08.

Data Sources Informing the AA Screening

The following general sources of information have been consulted for background environmental information:

- Online data available on European Sites as held by the NPWS from www.npws.ie – including site synopsis, conservation objectives and other relevant supporting documentation. SAC and SPA datasheet versions were dated 14 May 2024 (NPWS, 2024a; 2024b).
- GIS data for European Site boundaries obtained in digital format online from the NPWS (downloaded July 2023).
- Favourable reference ranges and tabulated threats and pressures for QI species/habitats in the NPWS latest national conservation status assessments (NPWS, 2019a, 2019b, 2019c).
- Birds of Conservation Concern in Ireland 4: 2020–2026 (Gilbert et al., 2021).

- Water Framework Directive, Programme of Measures, High Status Sites; Annex IV Protected Areas: Water Dependent Habitats and Species. December 2008 (Mayes, 2008).
- Online data available on European Sites as held by DAERA from <https://www.daera-ni.gov.uk/services/searching-protected-areas> including the DAERA natural environment map viewer <https://www.daera-ni.gov.uk/services/natural-environment-map-viewer>.
- Online information on Ramsar sites held by the UK Joint Nature Conservation Committee at <https://jncc.gov.uk/our-work/ramsar-sites/>.
- Article 17 Habitats Directive Report 2019: Habitat Conservation Status Assessments 2019 (JNCC, 2024a).
- Article 17 Habitats Directive Report 2019: Species Conservation Status Assessments 2019 (JNCC, 2024b).

2.3 Work Phases and Appropriate Assessment

The WSSP 2050 must meet the provisions of the Habitats Directive and Birds Directive, as indicated above, in addition to compliance with the SEA Directive. These directives have been transposed into Irish law by the Planning and Development Act, 2000 (as amended) and the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011) (as amended) (the Habitat Regulations).

Table 2-1 explains the work phases in the development of the WSSP 2050. The first step in the AA process is to undertake an AA screening (see Sections 1.6 and 5) which was undertaken in phase 1. The screening was completed during the first phase of the WSSP 2050 development. The NIS is carried out and completed during phases 2 and 3. Diagram 2-1 explains the process in more detail including the consultation stages and post WSSP 2050 finalisation.

Table 2-1: Work phases and consultations during the development of the WSSP 2050

Phase	Plans/Reports	Consultation
1	Issues Paper, SEA Scoping Report, AA Screening Report	Key stakeholder consultation including the environmental authorities specified in the SEA Regulations, the stakeholders referred to in section 33(2) of the Water Services (No. 2) Act, 2013 (as amended) and Northern Ireland environmental authorities. This consultation has been completed.
2	Draft WSSP 2050, SEA Environmental Report, Natura Impact Statement	Public consultation and key and statutory stakeholders. This consultation has been completed.
3	Final WSSP 2050, SEA Statement, Addendum to Natura Impact Statement (if required) and AA Determination	Plans/ Reports updated to address consultation feedback

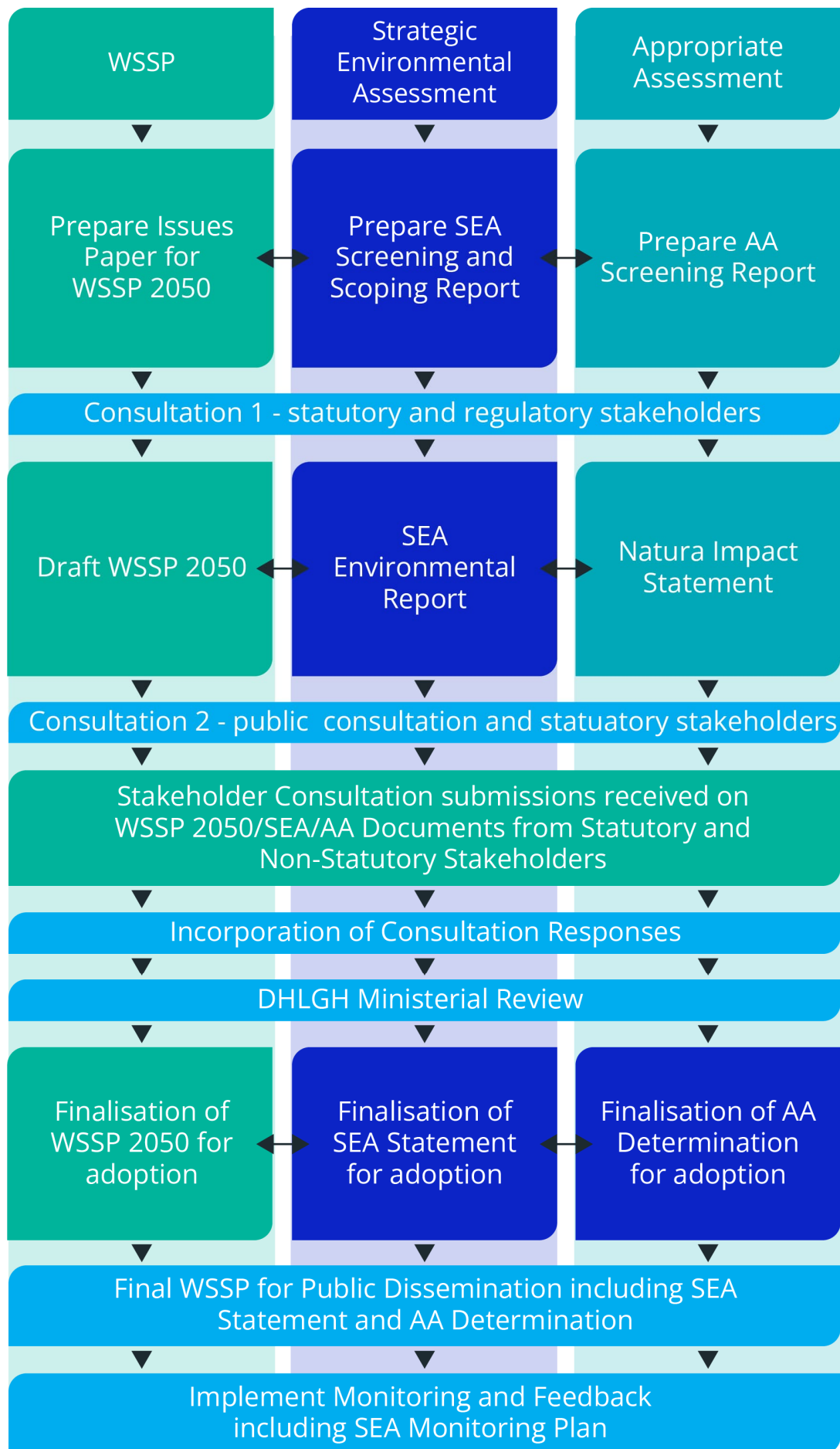


Diagram 2-1: Development of WSSP 2050 with the Environmental Assessments including NIS.

3 The WSSP 2050

3.1 Overview

Uisce Éireann is responsible for the operation of all public water and wastewater services in Ireland. They are the custodian of Ireland's precious water resources, for current and future generations.

It is UÉ's responsibility to ensure that all their customers (households and businesses) receive a safe and secure supply of drinking water and have their wastewater collected, appropriately treated, and returned safely to the environment.

Uisce Éireann's vision is for:

A sustainable Ireland where water is respected and protected, for the planet and all the lives it supports.

Uisce Éireann have considered the possible long term future scenarios and challenges that are likely to emerge taking account of the global megatrends through their Vision 2050 study. As a result, they have developed four strategic objectives to address the key challenges.

Safe and reliable drinking water	We ensure the quality of our water supplies are safe, and we deliver a water service that customers, communities, and the broader economy can rely on.
Support our customers, communities and the economy	We strive to provide an excellent service to our customers, and work with our stakeholders to deliver aligned priorities and support sustainable growth.
Protect and restore the environment	We deliver a reliable water and wastewater service that protects the environment, and we support a healthy environment by enhancing habitats and ecosystems.
Sustainable services fit for the future	We make decisions for the long-term which enable us to adapt and ensure our assets remain resilient.

Accompanying the four **strategic objectives** are fourteen **strategic aims** that will help UÉ to address their most critical challenges, and ensure that they continue to deliver water services for the long term.

Underpinning the objectives and aims are 35 actions which define the activities UÉ will need to implement to collectively manage the challenges UÉ faces over the next 25 years.

As previously stated, this WSSP 2050 is UÉ's long-term strategic plan, setting out their objectives to 2050 and the actions they will implement that will aim to deliver these objectives. The WSSP 2050 is the second WSSP following on from WSSP 2015. It builds on the plans and programmes delivered under the WSSP 2015, as well as outlining new approaches and actions to deliver obligations under new legislation and to respond to policy shifts and emerging challenges. The WSSP 2050 has been consulted on in 2024 and will be published in 2025.

3.2 Strategic Objectives

Further details of each of the strategic objectives and the 14 strategic aims is provided below. Table 3-1 lists the 35 key actions which represent the means to achieve the strategic objectives and aims.

3.2.1 Strategic Objective 1: Safe and Reliable Drinking Water

Since the publication of the first WSSP in 2015, Uisce Éireann have made significant progress towards ensuring the availability of safe and reliable drinking water in Ireland. This includes the publication of the first National Water Resources Plan (NWRP), identifying how a safe, sustainable, secure and reliable water supply whilst safeguarding the environment will be provided both now and into the future. The NWRP sits below the

WSSP as a Tier 2 plan and explains how relevant objectives in the WSSP will be achieved. The NWRP comprises the NWRP Framework Plan and four regional plans.

Over the period to 2050, a set of strategic aims and actions have been defined to continue to supply safe and reliable drinking water. These strategic aims are:

Safe and reliable drinking water	Ensuring safe drinking water: We will manage the safety and quality of drinking water from source to tap to protect human health.
	Delivering reliable water supplies: We will improve our assets and sources to ensure our supplies are robust enough to meet our customers' needs at the target level of service.
	Conserving our precious resources: We will take pressure off our resources through leakage reduction and helping our customers to conserve water.

3.2.2 Strategic Objective 2: Support our Customers, Communities and the Economy

Since the publication of the first WSSP in 2015, Uisce Éireann has made significant progress in supporting its customers, communities and the economy. Uisce Éireann's approach is to put customers first, to make a difference in communities which can help achieve long-term goals through catchment-based approaches. These strategic aims, in addition, are designed to not only benefit Uisce Éireann but also to promote sustainable economic growth, making a positive impact locally and nationally.

To address some of the issues around supporting customers, community and the economy Uisce Éireann have defined a set of strategic aims and actions. These strategic aims are:

Support our customers, communities and the economy	Delivering for customers: We will put our customers at the heart of what we do and deliver on their needs.
	Engaging with communities: We will engage with communities at a local level to realise the value from our shared water resources.
	Providing for growth: We will manage the availability of capacity to support housing and the economy in line with national policy.

3.2.3 Strategic Objective 3: Protect and Restore our Environment

Since the publication of the first WSSP in 2015, Uisce Éireann has made significant progress in protecting and restoring the environment through improvements to existing and development of new infrastructure. The provision of water and wastewater services which not only avoid damaging but also enhance the environment is vital to safeguard the well-being of current and future generations.

To address some of the issues around biodiversity conservation and the environment Uisce Éireann have defined a set of strategic aims and actions to guide them. These strategic aims are:

Protect and restore our environment	Protecting our water environment: We will play our part in protecting and restoring our water environment.
	Playing our part under the Water Framework Directive: We will work with others to progressively deliver on Water Framework Directive (WFD) objectives.
	Contributing to positive biodiversity: We will manage our assets to have biodiversity net gain.

3.2.4 Strategic Objective 4: Sustainable Services Fit for the Future

Ensuring sustainable water services is key to securing safe water and a protected environment for future generations. Uisce Éireann will aim to deliver sustainable water services by becoming a net zero carbon utility, maximising resource recovery and value from innovation and optimising asset lifecycle management. This will be underpinned by securing long-term funding.

To address some of the issues around sustainability, future uncertainty, data and resilience Uisce Éireann have defined a set of strategic aims and actions to guide them. These strategic aims are:

Sustainable services fit for the future	Achieving net zero carbon: We will progressively work towards achieving net zero carbon services.
	Adopting circular approaches: We manage our assets to maximise resource recovery and resource efficiency and minimise waste.
	Managing our assets: We will manage the risk and resilience of our services through best practice asset management.
	Gaining value from innovation: We will drive research and innovation to deliver value and meet future challenges.
	Securing long-term funding: We will work with our stakeholders to secure long-term funding for efficient and resilient services.

3.3 Strategic Aims and Actions

As stated above, each of the strategic objectives have a combined total of 14 strategic aims which address each component of the services UÉ provides. Underpinning the objectives and aims are 35 actions which outline the programme of work to be delivered. The actions outline the direction of travel and steps for UÉ over the next ten years to deliver on their long-term objectives. Table 3-1 outlines the strategic objectives, the strategic aims and the associated actions which comprise the Draft WSSP 2050.

Table 3-1: Strategic Objectives, their Strategic Aims and the Actions that support them.

Strategic Objectives	Strategic Aims	Actions
1. Safe and reliable drinking water	1. Ensuring safe drinking water: We will manage the safety and quality of drinking water from source to tap to protect human health.	Action 1.1: Undertake risk assessments across our supplies and implement appropriate measures to manage risk. Action 1.2: Conform with Drinking Water Directive and other legislative requirements relating to drinking water quality. Action 1.3: Coordinate integrated catchment management measures and champion nature-based solutions for improving source water quality.
	2. Delivering reliable water supplies: We will improve our assets and sources to ensure our supplies are robust enough to meet our customers' needs at the target level of service.	Action 1.4: Implement and continue to review our National Water Resources Plan, delivering improvements in water supply infrastructure to ensure resilient supplies into the future. Action 1.5: Develop contingency plans to improve reliability of our water supplies. Action 1.6: Improve operational resilience through preventative measures and developing and implementing improved incident response processes.
	3. Conserving our precious resources: We will take pressure off our resources through leakage reduction and helping our customers to conserve water.	Action 1.7: Use less water through promoting water conservation to help customers reduce their use. Action 1.8: Use less water through developing and implementing an enhanced Water Stewardship Programme. Action 1.9: Lose less water through delivering leakage reduction.
2. Support our customers, communities and the economy	4. Delivering for customers: We will put our customers at the heart of what we do and deliver on their needs.	Action 2.1: Understand customer needs and expectations. Action 2.2: Enhance customer communications to address our customer expectations and provide real-time information on usage, incidents and water quality. Action 2.3: Support our customers to play their part in protecting water as a precious resource and enabling better water services.
	5. Engaging with communities: We will engage with communities at a local level to realise the value from our shared water resources.	Action 2.4: Develop a community education and engagement programme to raise awareness on the value of water and the water services we provide. Action 2.5: Continue to develop amenity value in our assets with local communities, where safe and appropriate.
	6. Providing for growth: We will manage the availability of capacity to support housing and the economy in line with national policy.	Action 2.6: Engage and collaborate with key stakeholders to support national, regional and local planning policy. Action 2.7: Engage with housing and industry stakeholders to support delivery of new homes and economic growth. Action 2.8: Develop and embed demand analysis capability to inform, forecast and plan for future investment requirements.
3. Protect and restore our environment	7. Protecting our water environment: We will play our part in protecting and restoring our water environment.	Action 3.1: Work with regulators and stakeholders to develop a Wastewater Strategy Framework. Action 3.2: Develop and implement Integrated Urban Wastewater Management Plans. Action 3.3: Manage our water service assets and operations to reduce the risk of pollution threats to water bodies.
	8. Playing our part under the Water Framework Directive: We will work with others to progressively deliver on Water Framework Directive (WFD) objectives.	Action 3.4: Protect and restore water bodies through collaboration. Action 3.5: Manage wastewater services to achieve regulatory requirements. Action 3.6: Manage water services to achieve regulatory requirements.
	9. Contributing to positive biodiversity: We will manage our assets to have biodiversity net gain.	Action 3.7: Manage our assets to have biodiversity 'net gain'. Action 3.8: Champion nature-based solutions and catchment measures in the delivery of water and wastewater projects.

Strategic Objectives	Strategic Aims	Actions
4. Sustainable services fit for the future	10. Achieving net zero carbon: We will progressively work towards achieving net zero carbon services.	Action 4.1: Develop and implement a Net Zero Road Map. Action 4.2: Work with our supply chain to embed sustainability in the delivery of water and wastewater infrastructure.
	11. Adopting circular approaches: We manage our assets to maximise resource recovery and resource efficiency and minimise waste.	Action 4.3: Review and implement the National Wastewater Sludge Management Plan. Action 4.4: Maximise circular economy benefits.
	12. Managing our assets: We will manage the risk and resilience of our services through best practice asset management.	Action 4.5: Manage activities on our assets in a coordinated manner across their full lifecycle. Action 4.6: Ensure risk and value-based decision making across the lifecycle of assets.
	13. Gaining value from innovation: We will drive research and innovation to deliver value and meet future challenges.	Action 4.7: Develop a culture of innovation in the water services sector to enable a sustainable future. Action 4.8: Continue to develop foresight and horizon scanning capability.
	14. Securing long-term funding: We will work with our stakeholders to secure long-term funding for efficient and resilient services.	Action 4.9: Quantify and articulate long-term investment needs for our water and wastewater assets. Action 4.10: Secure multi-annual funding approach.



3.4 Implementation

The WSSP 2050 sets the overarching framework for subsequent more detailed implementation plans. The relationship of this (Tier 1) Water Services Strategic Plan to the (Tier 2) implementation plans, and the future (Tier 3) plans is illustrated in Diagram 3-1 with their relationship to national and local policies and strategies included.

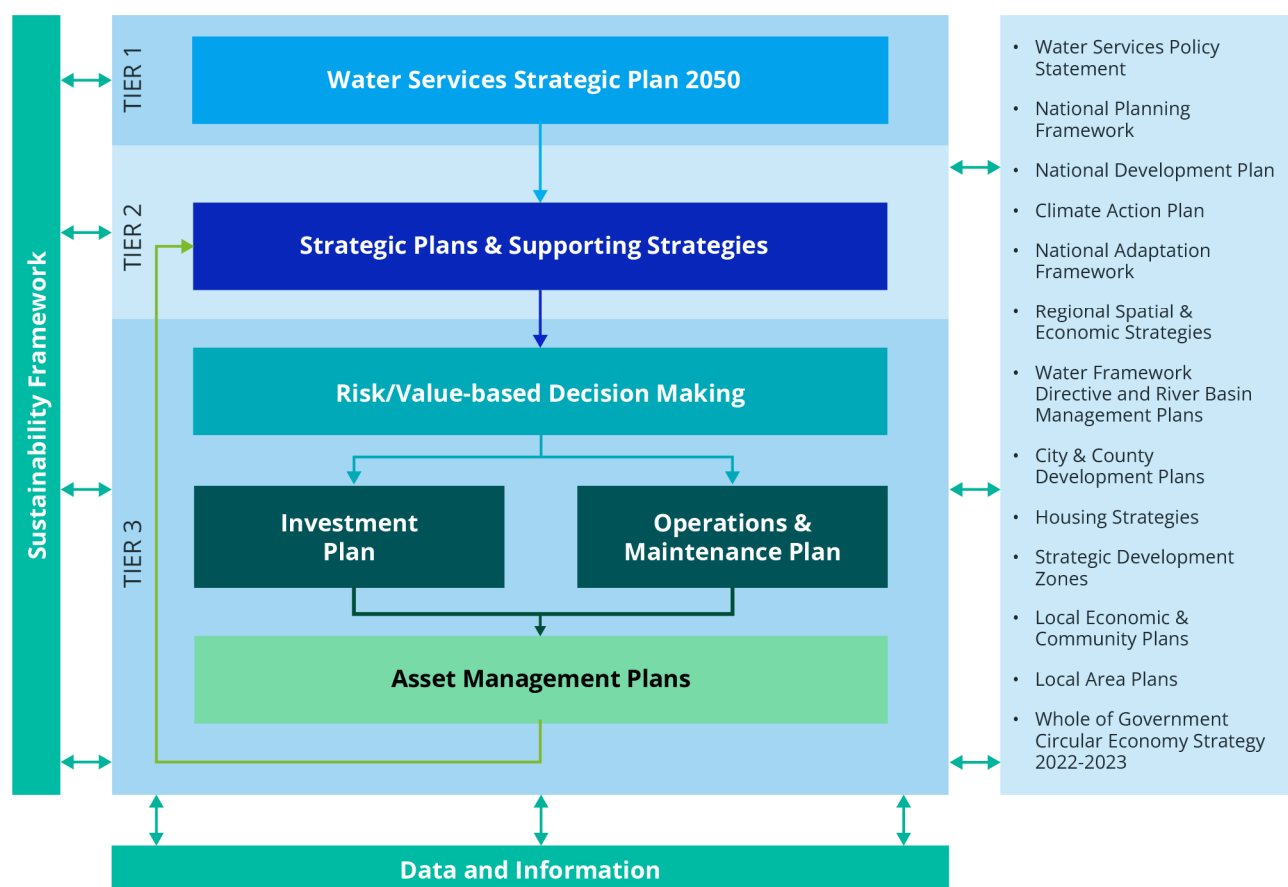


Diagram 3-1: Relationship of this Tier 1 WSSP to Tier 2 Strategic Plans, Supporting Strategies and more detailed implementation plans and their relationship to national and local policies and strategies

Uisce Éireann (UÉ) outlines its long-term objectives and their strategic direction of travel to achieve them in the Water Services Strategic Plan (WSSP). The approach to achieve them is detailed through Tier 2 plans such as the National Water Resources Plan, which ensures water supply resilience over 25 years. The National Wastewater Strategy Framework will serve a similar purpose for wastewater management. These plans are supported by additional strategies, such as the National Wastewater Sludge Management Plan and the Biodiversity Action Plan. Both the plans and strategies are subject to Strategic Environmental Assessment and Appropriate Assessment, including public consultation.

The WSSP and Tier 2 plans inform the Tier 3 plans, including capital projects and programmes for 5-year regulatory periods. Due to funding limitations, these plans are prioritised to align with government policies outlined in the Water Services Policy Statement (WSPS).

3.4.1 Monitoring and reporting

Uisce Éireann is closely monitored and regulated to ensure accountability and performance. The Department of Housing, Local Government and Heritage oversees the water sector, while UÉ's operations and investments are regulated by the Commission for Regulation of Utilities (CRU) and the Environmental Protection Agency (EPA). Uisce Éireann reports on various performance metrics to the CRU and engages in a statutory stakeholder engagement process for its Capital Investment Plan, which is also subject to public

consultation. The EPA ensures compliance with water standards and publishes annual reports on drinking water quality and wastewater treatment, highlighting areas requiring improvement.

In addition to regulatory reporting, UÉ's performance is documented in their annual report. This report provides insights into the organisation's performance against established metrics. In 2026, this will include the first reporting under the Corporate Sustainability Directive (EU 2022/2464) ('CSRD'), for the financial year 2025, which will provide information on how sustainability matters affect the company and the impact of the company's activities on the environment and people. Monitoring of environmental outcomes will also be undertaken as required under the Strategic Environmental Assessment (SEA) regulations and in accordance with the Monitoring Plan provided in Table 9.2 of the SEA Environmental Report.



4 Ecological Baseline/Site Overview

Ireland is home to 28 species of land mammal, over 400 species of birds, more than 4,000 plant species and over 12,000 species of insect (NPWS, 2024c). Ireland aims to conserve habitats and species, through designation of conservation areas under European and national legislation. The Natura 2000 network comprises:

- 441 SACs, and;
- 167 SPAs³.

In addition to these, the Northern Ireland National Site Network⁴ comprises 58 SACs, 18 SPAs (including two proposed SPAs (pSPAs)) and 23 Ramsar sites (three of which are proposed).

The locations of these sites can be seen in Figure 1.

Special Areas of Conservation

The 441 SACs (Figure 1) support 59 habitats (Table 4-1) and 24 species⁵ (Table 4-2). The most common habitats designated are bogs and heaths of various types. Conservation status information (NPWS, 2019a) indicates that the majority of habitats are in inadequate (46%) or bad (39%) condition. Furthermore, whilst 55% of habitats had a stable or improving trend, 46% had a declining trend (NPWS, 2019a). Eighteen habitats (31%) were in both a bad condition and showed a declining trend. This included marine, freshwater, grassland and bog habitats.

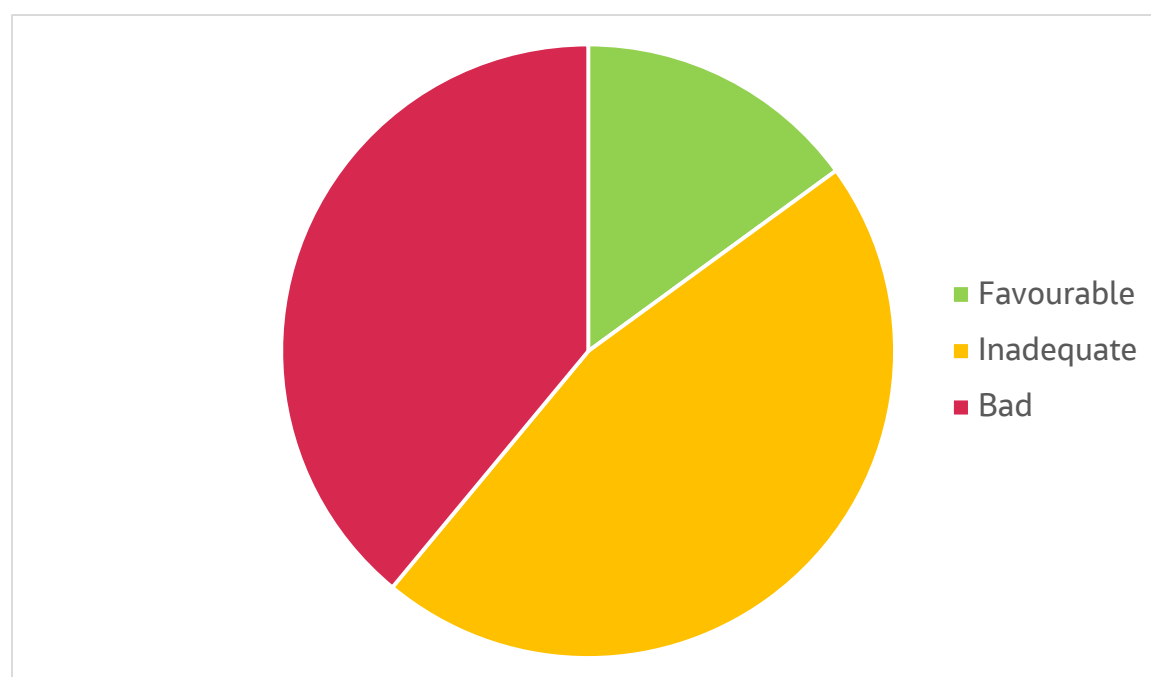


Diagram 4-1: Condition status of SAC habitats.

The condition status of species appears to be better with 50% in a favourable condition and 21% in a bad condition. Furthermore, 67% of the species had a stable or improving trend. However, three species –

³ An additional SPA as well as additional qualifying interests for both SACs and SPAs were noted in NPWS's updated spreadsheets (May 2025)

⁴ As a result of the United Kingdom's decision to leave the EU the network of European protected sites is now known as "National Site Network" in Northern Ireland, as well as the rest of the UK.

⁵ Due to taxonomic changes the number of species has been reduced from 25 to 24. although not all relevant documentation has been updated. See Table 4-2 for more details.

freshwater pearl mussel, Geyer's whorl snail, white-clawed crayfish (all species of freshwater habitats) – were in a bad condition and showed a declining trend.

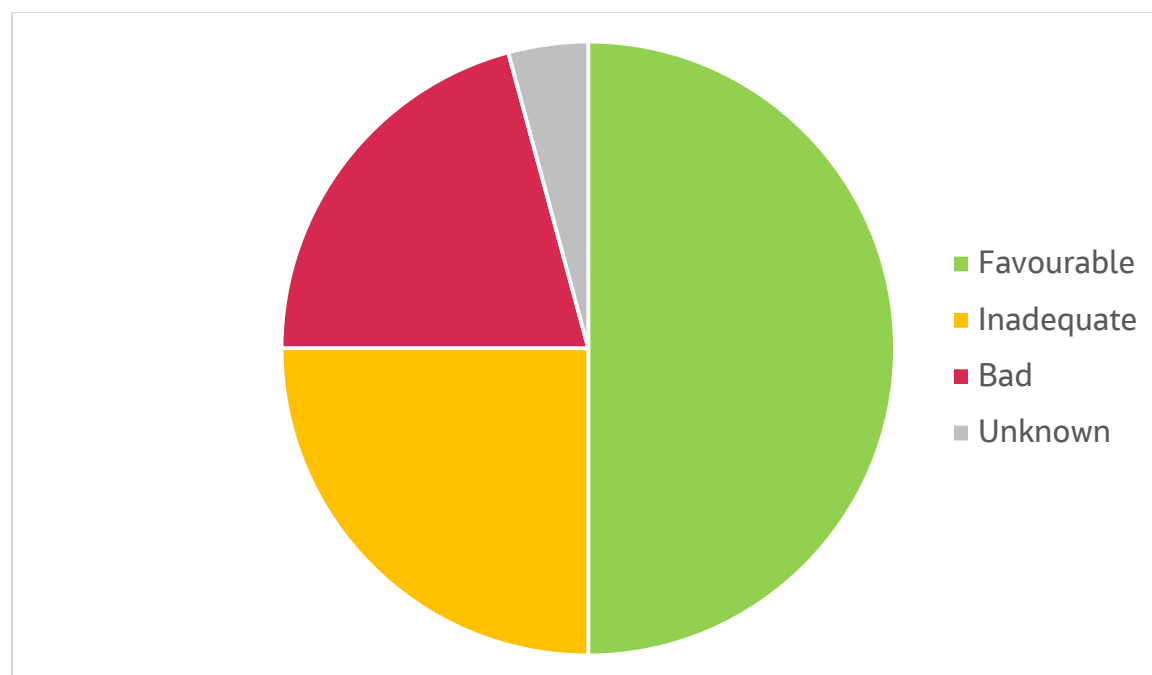


Diagram 4-2: condition status of SAC species

Information on water dependency of habitats and species features is taken from Mayes (2008). The majority of the habitat features (75%) are dependent on (supported by) groundwater, surface water and/or marine water. 12% of habitats are solely dependent on groundwater whilst 47% are at least partly dependent on it, with water also coming from the surface and/or marine sources. No habitats are solely dependent on surface water but 32% are at least partly dependent on it. While 24% of habitats are dependent on marine sources only. Thus, a large proportion of protected habitats are susceptible to impacts resulting from water management operations.

Impacts to these water sources, such as by abstraction or release of pollutants, could have an effect on these features. Even those features which are not directly dependent on these water sources, such as lowland hay meadows, will be reliant on precipitation and, furthermore, could be affected through infrastructure development.

Of the 24 species features of the SACs, 21 (88%) are assessed as being dependent on the various types of water sources. This included two species for whom information had not been provided in Mayes (2008) but was available through other sources; the Killarney shad is endemic to a single lake (Lough Leane) whilst the slender green feather moss is found in upland transitional flushes and wet lowland sedge meadows and fens (Campbell et al., 2013) – see also Table 4-2. Thus, a large proportion of SAC species could be susceptible to impacts resulting from water management operations.

As a result, it is calculated that 88% of SACs in Ireland are in some way dependent on groundwater, surface water or marine water, or a combination of them through either the habitats or the species they support. These sites could be susceptible to impacts as a result of a range of water management operations.

In Ireland, the EPA has identified waters (rivers, lakes estuaries and coastal waters) that should have a high status objective, known as Blue Dot Waters. The Blue Dot Catchments Programme is a collaborative programme between a range of agencies aimed at the protection and restoration of our high status objective waters (LAWPRO, 2024). Some SACs and SPAs in Ireland support Blue Dot sites. However, not all water features within SACs are Blue Dot sites and some water features classed as Blue Dots are not SACs (or SPAs).

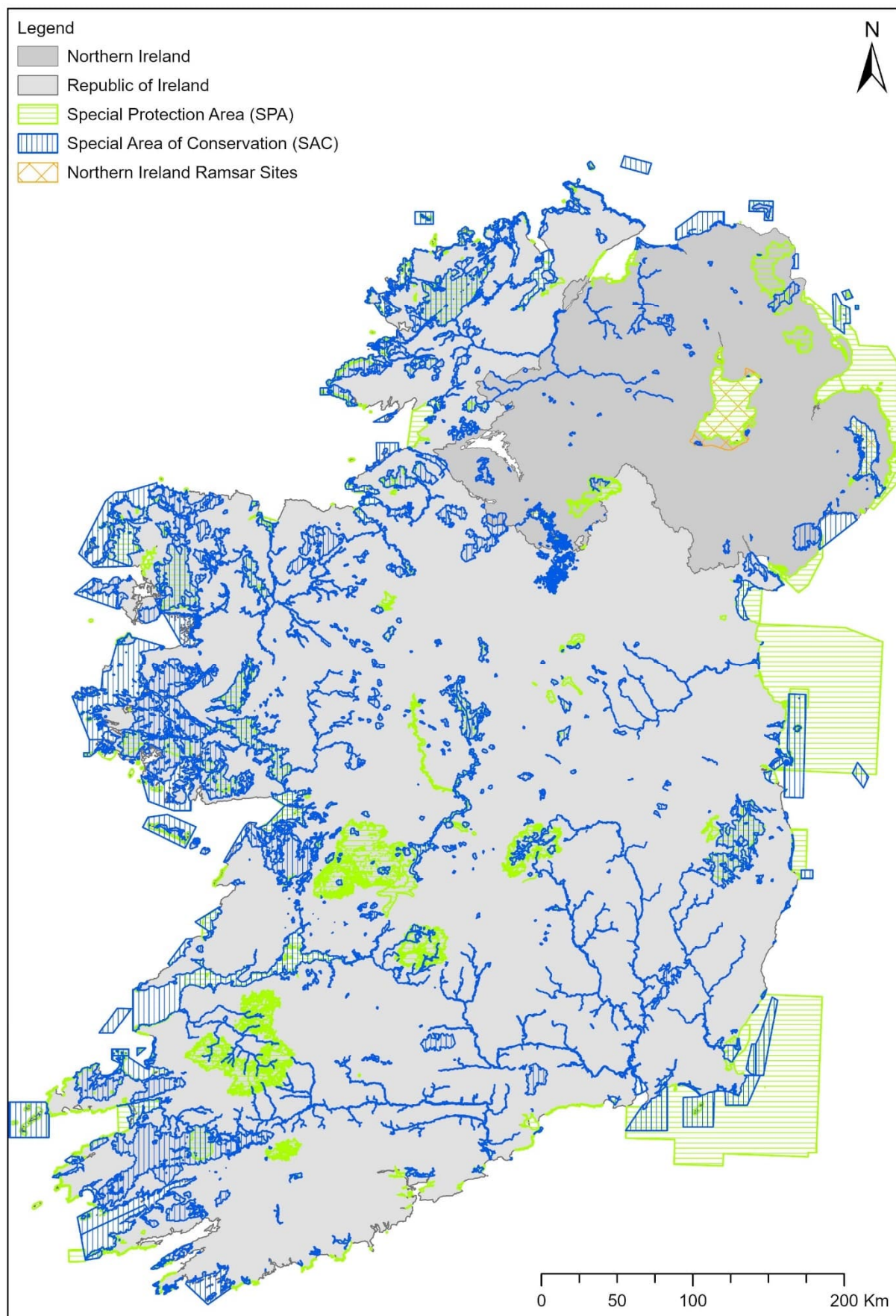


Figure 1: Distribution of European Sites on the Island of Ireland

Table 4-1: Protected SAC Habitats in Ireland, the number of sites in which they occur (Count) and their Status (Condition and Trend). Water dependency (Mayes, 2008) is GW (groundwater), MW marine water), SW (surface water). - is used where there is no specified water dependency. * denotes priority habitats.

Habitat	Count	Condition	Trend	Water Dependency
Marine, coastal and halophytic habitats				
1170 Reefs	48	Inadequate	Stable	MW
1140 Mudflats and sandflats not covered by seawater at low tide	43	Inadequate	Declining	MW
1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)	41	Inadequate	Declining	GW, MW
1220 Perennial vegetation of stony banks	36	Inadequate	Stable	MW
1230 Vegetated sea cliffs of the Atlantic and Baltic Coasts	35	Inadequate	Stable	MW
1410 Mediterranean salt meadows (<i>Juncetalia maritimi</i>)	34	Inadequate	Declining	GW, MW
1210 Annual vegetation of drift lines	28	Inadequate	Declining	MW
1150 Coastal lagoons	25	Bad	Declining	SW, GW, MW
1310 <i>Salicornia</i> and other annuals colonizing mud and sand	25	Favourable	Stable	MW
1160 Large shallow inlets and bays	22	Bad	Declining	SW, MW
1130 Estuaries	19	Inadequate	Declining	SW, MW
1110 Sandbanks which are slightly covered by sea water all the time	4	Favourable	Stable	MW
1420 Mediterranean and thermo-Atlantic halophilous scrubs (<i>Sarcocornetea fruticosi</i>)	2	Bad	Declining	MW
1180 Submarine structures made by leaking gases	1	Favourable	Stable	-
Coastal sand dunes and continental dunes				
2120 Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes")	48	Inadequate	Stable	MW
2130 Fixed coastal dunes with herbaceous vegetation ("grey dunes")	47	Bad	Declining	MW

Habitat	Count	Condition	Trend	Water Dependency
2110 Embryonic shifting dunes	39	Inadequate	Stable	MW
2190 Humid dune slacks	24	Inadequate	Declining	GW, MW
21A0 Machairs (* in Ireland)	22	Inadequate	Stable	SW, GW, MW
2170 Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>)	13	Inadequate	Stable	MW, GW
2150 Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>)	11	Inadequate	Stable	MW
2140 Decalcified fixed dunes with <i>Empetrum nigrum</i>	5	Favourable	Stable	MW
Freshwater habitats				
3180 Turloughs	45	Inadequate	Stable	SW, GW
3110 Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>)	28	Bad	Stable	SW, GW
3130 Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoeto-Nanojuncetea</i>	23	Inadequate	Stable	SW, GW
3260 Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation	21	Inadequate	Declining	SW, GW
3140 Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp.	19	Bad	Declining	SW, GW
3160 Natural dystrophic lakes and ponds	10	Inadequate	Stable	SW, GW
3150 Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> - type vegetation	9	Inadequate	Stable	SW, GW
3270 Rivers with muddy banks with <i>Chenopodion rubri</i> p.p. and <i>Bidention</i> p.p. vegetation	7	Favourable	Stable	SW, GW
Temperate heath and scrub				
4030 European dry heaths	59	Bad	Stable	-
4010 Northern Atlantic wet heaths with <i>Erica tetralix</i>	45	Bad	Declining	GW

Habitat	Count	Condition	Trend	Water Dependency
4060 Alpine and Boreal heaths	35	Bad	Improving	-
Sclerophyllous scrub (matorral)				
5130 <i>Juniperus communis</i> formations on heaths or calcareous grasslands	23	Favourable	Stable	-
Natural and semi-natural grassland formations				
6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites)	38	Bad	Declining	-
6410 <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)	17	Bad	Declining	GW
6230 Species-rich <i>Nardus</i> grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	12	Bad	Declining	-
6510 Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>)	11	Bad	Declining	-
6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	6	Bad	Declining	SW, GW
6130 Calaminarian grasslands of the <i>Violetalia calaminariae</i>	5	Inadequate	Declining	-
Raised bogs and mires and fens				
7150 Depressions on peat substrates of the <i>Rhynchosporion</i>	63	Bad	Declining	SW, GW
7120 Degraded raised bogs still capable of natural regeneration	62	Bad	Declining	SW, GW
7110 Active raised bogs	55	Bad	Declining	SW, GW
7130 Blanket bogs (* if active bog)	55	Bad	Declining	GW
7230 Alkaline fens	39	Bad	Declining	GW
7220 Petrifying springs with tufa formation (<i>Cratoneurion</i>)	21	Inadequate	Declining	GW
7140 Transition mires and quaking bogs	20	Bad	Stable	SW, GW

Habitat	Count	Condition	Trend	Water Dependency
7210 Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i>	17	Inadequate	Stable	GW
Rocky habitats and caves				
8240 Limestone pavements	25	Inadequate	Stable	-
8220 Siliceous rocky slopes with chasmophytic vegetation	18	Inadequate	Stable	-
8210 Calcareous rocky slopes with chasmophytic vegetation	14	Inadequate	Stable	-
8110 Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>)	14	Inadequate	Stable	-
8330 Submerged or partially submerged sea caves	12	Favourable	Stable	MW
8310 Caves not open to the public	9	Favourable	Stable	GW
8120 Calcareous and calcshist screes of the montane to alpine levels (<i>Thlaspietea rotundifolii</i>)	3	Inadequate	Stable	-
Forests				
91A0 Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	39	Bad	Declining	-
91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>)	28	Bad	Declining	SW, GW
91D0 Bog woodland	12	Favourable	Stable	GW
91J0 <i>Taxus baccata</i> woods of the British Isles	5	Bad	Stable	-

Table 4-2: Protected SAC Species in Ireland, the number of sites in which they occur (Count) and their Status (Condition and Trend). Water dependency (Mayes, 2008) is GW (groundwater), MW marine water), SW (surface water). - is used where there is no specified water dependency.

Common Name	Scientific Name	Count	Condition	Trend	Water Dependency
Invertebrates: Molluscs					
1029 Freshwater pearl mussel / Nore pearl mussel ⁶	<i>Margaritifera margaritifera</i>	19	Bad	Declining	SW
1014 Narrow-mouthed whorl snail	<i>Vertigo angustior</i>	13	Inadequate	Declining	GW
1013 Geyer's whorl snail	<i>Vertigo geyeri</i>	13	Bad	Declining	GW
1016 Desmoulin's whorl Snail	<i>Vertigo moulinsiana</i>	8	Inadequate	Declining	SW, GW
1024 Kerry slug	<i>Geomalacus maculosus</i>	7	Favourable	Improving	-
Invertebrates: Arthropods					
1092 White-clawed crayfish	<i>Austropotamobius pallipes</i>	15	Bad	Declining	SW, GW
1065 Marsh fritillary	<i>Euphydryas aurinia</i>	12	Inadequate	Improving	-
Vertebrates: Fish					
1106 Atlantic salmon	<i>Salmo salar</i>	26	Inadequate	Stable	SW, MW
1095 Sea lamprey	<i>Petromyzon marinus</i>	12	Bad	Stable	SW, MW
1096 Brook lamprey	<i>Lampetra planeri</i>	10	Favourable	Stable	SW
1099 River lamprey	<i>Lampetra fluviatilis</i>	10	Unknown	Unknown	SW
1103 Twaite shad	<i>Alosa fallax</i>	4	Bad	Stable	SW, MW
5046 Killarney shad	<i>Alosa killarnensis</i>	1	Favourable	Stable	No information ¹
Vertebrates: Mammals					
1355 Otter	<i>Lutra lutra</i>	45	Favourable	Improving	SW, MW

⁶ Genetic research has placed the Nore population within the freshwater pearl mussel (*Margaritifera margaritifera*) taxon. The relevant SAC (River Barrow and River Nore SAC) is also designated for freshwater pearl mussel.

Common Name	Scientific Name	Count	Condition	Trend	Water Dependency
1303 Lesser horseshoe bat	<i>Rhinolophus hipposideros</i>	42	Inadequate	Declining	-
1351 Harbour porpoise	<i>Phocoena phocoena</i>	16	Favourable	Stable	MW
1365 Harbour seal	<i>Phoca vitulina</i>	13	Favourable	Stable	MW
1349 Common bottlenose dolphin	<i>Tursiops truncatus</i>	10	Favourable	Stable	MW
1364 Grey seal	<i>Halichoerus grypus</i>	10	Favourable	Improving	MW
Lower Plants					
1395 Petalwort	<i>Petalophyllum ralfsii</i>	21	Favourable	Stable	GW
6216 Slender green feather-moss	<i>Hamatocaulis vernicosus</i>	9	Favourable	Stable	No information ²
Higher Plants					
1833 Slender naiad	<i>Najas flexilis</i>	24	Inadequate	Declining	SW
1421 Killarney fern	<i>Trichomanes speciosum</i>	18	Favourable	Stable	SW
1528 Marsh saxifrage	<i>Saxifraga hirculus</i>	6	Favourable	Stable	GW

¹ Although there is no information for Killarney shad, SAC details indicate that it would be freshwater (SW) dependent.

² Although there is no information for slender green feather-moss Campbell et al. (2013) indicate that the species occurs in mesotrophic fens and it is therefore assumed to be GW and SW dependent.

Special Protection Areas

There are 167 SPAs in Ireland which support a wide range of bird species (Table 4-3). Condition status has not been assessed for these species and as a result their Red, Amber or Green conservation status according to the *Birds of Conservation Concern in Ireland 4: 2020–2026* (BoCCI4) (Gilbert et al., 2021) has been used as a proxy. Twenty-five of the 72 individual species are on the Red list (the highest conservation priority) with another 41 (57%) on the Amber list.

Of the 167 sites 99 (59%) support at least one Red listed species with the remaining sites (41%) supporting at least one Amber listed species; no SPAs support only Green listed species. Additionally, for 66 of the 167 SPAs the presence of wetlands has contributed to their selection as SPAs (NPWS, 2024b).

Table 4-3: Protected SPA Species in Ireland, the number of sites in which they occur (Count) and their Status (BoCCI4 listing).

Common Name	Scientific Name	Count	BoCCI4 List
Auks			
Guillemot	<i>Uria aalge</i>	13	Amber
Razorbill	<i>Alca torda</i>	12	Red
Puffin	<i>Fratercula arctica</i>	11	Red
Boobies & Gannets			
Gannet	<i>Morus bassanus</i>	4	Amber
Cormorants & Shags			
Cormorant	<i>Phalacrocorax carbo</i>	24	Amber
Shag	<i>Phalacrocorax aristotelis</i> ⁷	16	Amber
Crows			
Chough	<i>Pyrhocorax pyrrhocorax</i>	18	Amber
Divers			
Red-throated diver	<i>Gavia stellata</i>	8	Amber
Great northern diver	<i>Gavia immer</i>	5	Amber
Black-throated diver	<i>Gavia arctica</i>	1	Amber
Ducks, Geese & Swans			
Greenland white-fronted goose	<i>Anser albifrons flavirostris</i>	29	Amber
Wigeon	<i>Anas penelope</i> ⁸	25	Amber
Light-bellied brent goose	<i>Branta bernicla hrota</i>	24	Amber
Barnacle goose	<i>Branta leucopsis</i>	22	Amber
Whooper swan	<i>Cygnus cygnus</i>	22	Amber
Teal	<i>Anas crecca</i>	21	Amber

⁷ Now known as *Gulosus aristotelis*

⁸ Now known as *Mareca penelope*

Common Name	Scientific Name	Count	BoCCI4 List
Shelduck	<i>Tadorna tadorna</i>	17	Amber
Shoveler	<i>Anas clypeata</i> ⁹	15	Red
Pintail	<i>Anas acuta</i>	11	Amber
Tufted duck	<i>Aythya fuligula</i>	11	Amber
Common scoter	<i>Melanitta nigra</i>	10	Red
Red-breasted merganser	<i>Mergus serrator</i>	10	Amber
Mallard	<i>Anas platyrhynchos</i>	9	Amber
Greylag goose	<i>Anser anser</i>	8	Amber
Goldeneye	<i>Bucephala clangula</i>	6	Red
Pochard	<i>Aythya ferina</i>	6	Red
Scaup	<i>Aythya marila</i>	5	Red
Gadwall	<i>Anas strepera</i>	4	Amber
Bewick's swan	<i>Cygnus columbianus bewickii</i>	3	Red
Eider	<i>Somateria mollissima</i>	1	Red
Falcons			
Peregrine	<i>Falco peregrinus</i>	10	Green
Merlin	<i>Falco columbarius</i>	7	Amber
Grebes			
Great crested grebe	<i>Podiceps cristatus</i>	9	Amber
Little grebe	<i>Tachybaptus ruficollis</i>	6	Green
Slavonian grebe	<i>Podiceps auritus</i>	1	Red
Gull & Terns			
Common gull	<i>Larus canus</i>	22	Amber
Black-headed gull	<i>Chroicocephalus ridibundus</i>	21	Amber
Herring gull	<i>Larus argentatus</i>	20	Amber
Kittiwake	<i>Rissa tridactyla</i>	19	Red
Arctic tern	<i>Sterna paradisaea</i>	18	Amber
Lesser black-backed gull	<i>Larus fuscus</i>	16	Amber
Common tern	<i>Sterna hirundo</i>	15	Amber
Little tern	<i>Sterna albifrons</i>	10	Amber
Sandwich tern	<i>Sterna sandvicensis</i>	10	Amber

⁹ Now known as *Spatula clypeata*

Common Name	Scientific Name	Count	BoCCI4 List
Roseate tern	<i>Sterna dougallii</i>	6	Amber
Great black-backed gull	<i>Larus marinus</i>	1	Green
Little gull	<i>Larus minutus</i>	1	Amber
Mediterranean gull	<i>Larus melanocephalus</i>	1	Amber
Herons, Storks & Ibises			
Grey heron	<i>Ardea cinerea</i>	4	Green
Kingfishers			
Kingfisher	<i>Alcedo atthis</i>	2	Amber
Kites, Hawks & Eagles			
Hen harrier	<i>Circus cyaneus</i>	8	Amber
Oystercatchers			
Oystercatcher	<i>Haematopus ostralegus</i>	16	Red
Petrels & Shearwaters			
Fulmar	<i>Fulmarus glacialis</i>	19	Amber
Storm petrel	<i>Hydrobates pelagicus</i>	11	Amber
Manx shearwater	<i>Puffinus puffinus</i>	7	Amber
Leach's storm-petrel	<i>Oceanodroma leucorhoa</i>	1	Red
Plovers			
Golden plover	<i>Pluvialis apricaria</i>	36	Red
Lapwing	<i>Vanellus vanellus</i>	23	Red
Grey plover	<i>Pluvialis squatarola</i>	21	Red
Ringed plover	<i>Charadrius hiaticula</i>	15	Amber
Rails, Crakes & Coots			
Coot	<i>Fulica atra</i>	12	Amber
Corncrake	<i>Crex crex</i>	10	Red
Sandpipers, Snipes & Phalaropes			
Black-tailed godwit	<i>Limosa limosa</i>	25	Red
Bar-tailed godwit	<i>Limosa lapponica</i>	24	Red
Dunlin	<i>Calidris alpina</i>	23	Red
Redshank	<i>Tringa totanus</i>	21	Red
Curlew	<i>Numenius arquata</i>	19	Red
Sanderling	<i>Calidris alba</i>	15	Green

Common Name	Scientific Name	Count	BoCCI4 List
Knot	<i>Calidris canutus</i>	13	Red
Turnstone	<i>Arenaria interpres</i>	11	Amber
Dunlin	<i>Calidris alpina schinzii</i>	6	Red
Purple sandpiper	<i>Calidris maritima</i>	4	Red
Greenshank	<i>Tringa nebularia</i>	3	Green

Conservation Objectives

The NPWS have developed generic or specific conservation objectives for all European Sites. Site-specific conservation objectives aim to define favourable conservation condition for a particular habitat or species at a site. The maintenance of habitats and species within the Natura 2000 network at favourable conservation condition contributes to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Northern Ireland National Site Network

Special Areas of Conservation

There are 58 SACs in Northern Ireland. This includes the North Channel cSAC designated for harbour porpoise which was submitted to the European Commission as a candidate SAC in January 2017 and designated as an SAC in February 2019.

The most common habitats are across the SACs active raised bogs (H7110), old oak woods (H91A0) and blanket bogs (H7130). Conservation Status information (JNCC, 2024a) indicates that all habitats were classed as being Unfavourable (either Bad or Inadequate) (Table 4-4). Furthermore, 24% show a Deteriorating trend in Conservation Status; 39% were Stable whilst 26% were Improving (11% were unknown).

The condition status of SAC species (JNCC, 2024b) appears to be better with three of the 12 species in a Favourable condition (marsh saxifrage, otter and grey seal see **(Table 4-5)**). Seven of the species were in an Unfavourable condition (either Unfavourable-Bad or Unfavourable-Inadequate); while two species are of an

Unknown Conservation Status (harbour porpoise and bottlenose dolphin). Four of the species showed a Deteriorating conservation trend whilst five were Stable or Improving including all those in a Favourable condition. It should be noted that conservation status/trend information was reported at the UK scale for both habitats and species and the specific Conservation Status of features within Northern Ireland may differ slightly.

Condition information is also available from the DAERA website as a summary of condition assessment status for 2023/24 for terrestrial Area of Special Scientific Interest (ASSI) and marine features. Most of these features also overlap with SAC (and SPA) features. Of all the 163 features identified across all sites 61 (37%) were in a Favourable condition and 87 (53%) were in an Unfavourable condition. For 9% of features a condition could not be allocated either because there was not enough information, or because a feature at a site varied in its condition.

74% of SAC habitats were at least partly dependent on ground, marine and/or surface water with 48% at least partly dependent on ground and/or surface water. 26% of habitats were not specifically dependent on such water sources including some woodland, grassland and rocky habitats.

All but one of the SAC species were at least partly dependent on ground, marine and/or surface water with seven species at least partly dependent and/or ground or surface water.

Of all the features across all sites, solely groundwater dependent features were more likely to be in an Unfavourable condition (65%) than in a Favourable condition (27% – 8% had a varied condition). Of those features dependent solely on marine water 51% were in a Favourable condition whilst 34% were in an Unfavourable condition.

Special Protection Areas

The 18 SPAs, including the East Coast Marine pSPA and Carlingford Marine pSPA, support 54 bird species (Table 4-6). Nineteen of the species are Red list species with 32 Amber listed; only three species are on the Green list. Of the 18 SPAs, nine support at least one Red listed species whilst the other nine support at least one Amber listed species. No SPAs support only Green listed species.

Ramsar Sites

The National Site Network also includes Ramsar sites¹⁰ of which there are 23 designated or proposed sites in Northern Ireland. All of these are partly or fully designated as either SACs, SPAs or both (see Appendix C). However, parts of one site – the Lough Neagh and Lough Beg Ramsar site – are not an SAC or an SPA, or an ASSI.

Of the 20 designated Ramsar sites seven are marine sites and are designated for their importance in supporting breeding and/or wintering bird populations. Two of these marine sites are also designated for their wetland habitat features.

The 13 designated non-marine sites all qualify for their wetland habitats including raised bog, blanket bog, freshwater lake habitats and turloughs. Four sites also qualify for supporting populations of bird species whilst three sites qualify for their support of rare plant species. Lough Neagh and Lough Beg Ramsar site also qualifies for supporting a population of the fish species pollan (*Coregonus autumnalis*), one of the few locations in Ireland (and one of the two known pollan locations in the UK the other being Lower Lough Erne which is not a designated site).

¹⁰ Ramsar Sites are wetlands of international importance designated under the Ramsar Convention. It is UK Government policy to apply the procedures under the Habitats Regulations in respect of Ramsar sites, and this remains the policy in Northern Ireland.

Of the three proposed Ramsar sites, Dundrum Bay is classed as a marine site although the features for which it would qualify have not been confirmed. The two other proposed sites – Derryleckagh and Teal Lough – would qualify for their wetland habitats (transitional fen-bog and upland/raised bog).



Table 4-4: Protected SAC Habitats in Northern Ireland, the number of sites in which they occur (Count) and their Status (Condition and Trend). Water dependency (Mayes, 2008) is GW (groundwater), MW marine water), SW (surface water) – is used where there is no specified water dependency.

Habitat	Count	Condition Status	Trend	Water Dependency
Marine, coastal and halophytic habitats				
1110 Sandbanks which are slightly covered by sea water all the time	4	Unfavourable - Bad	Unknown	MW
1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)	4	Unfavourable - Bad	Deteriorating	GW, MW
1170 Reefs	3	Unfavourable - Inadequate	Unknown	MW
1210 Annual vegetation of drift lines	3	Unfavourable - Bad	Unknown	MW
1140 Mudflats and sandflats not covered by seawater at low tide	2	Unfavourable - Bad	Unknown	MW
1150 Coastal lagoons	1	Unfavourable - Inadequate	Stable	SW, GW, MW
1160 Large shallow inlets and bays	1	Unfavourable - Inadequate	Stable	SW, MW
1220 Perennial vegetation of stony banks	1	Unfavourable - Bad	Stable	MW
1230 Vegetated sea cliffs of the Atlantic and Baltic Coasts	1	Unfavourable - Bad	Deteriorating	MW
1310 <i>Salicornia</i> and other annuals colonizing mud and sand	1	Unfavourable - Bad	Unknown	MW
Coastal sand dunes and continental dunes				
2120 Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes")	4	Unfavourable - Bad	Deteriorating	MW
2130 Fixed coastal dunes with herbaceous vegetation ("grey dunes")	4	Unfavourable - Bad	Deteriorating	MW
2110 Embryonic shifting dunes	3	Unfavourable - Bad	Deteriorating	MW
2170 Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>)	2	Unfavourable - Bad	Deteriorating	MW, GW
2150 Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>)	1	Unfavourable - Bad	Deteriorating	MW
2190 Humid dune slacks	1	Unfavourable - Bad	Deteriorating	GW, MW

Habitat	Count	Condition Status	Trend	Water Dependency
Freshwater habitats				
3260 Water courses of plain to montane levels with the <i>Ranunculon fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation	5	Unfavourable - Bad	Improving	SW, GW
3160 Natural dystrophic lakes and ponds	4	Unfavourable - Bad	Stable	SW, GW
3130 Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoeto-Nanojuncetea</i>	3	Unfavourable - Bad	Stable	SW, GW
3150 Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> - type vegetation	2	Unfavourable - Bad	Deteriorating	SW, GW
3140 Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp.	1	Unfavourable - Bad	Stable	SW, GW
3180 Turloughs	1	Unfavourable - Bad	Stable	SW, GW
Temperate heath and scrub				
4010 Northern Atlantic wet heaths with <i>Erica tetralix</i>	5	Unfavourable - Bad	Deteriorating	GW
4030 European dry heaths	4	Unfavourable - Bad	Improving	-
4060 Alpine and Boreal heaths	2	Unfavourable - Bad	Improving	-
Natural and semi-natural grassland formations				
6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites)	2	Unfavourable - Bad	Stable	-
6230 Species-rich <i>Nardus</i> grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	2	Unfavourable - Bad	Improving	-
6410 <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)	2	Unfavourable - Bad	Stable	GW
6150 Siliceous alpine and boreal grasslands	1	Unfavourable - Bad	Improving	-

Habitat	Count	Condition Status	Trend	Water Dependency
Raised bogs and mires and fens				
7110 Active raised bogs	15	Unfavourable - Bad	Improving	SW, GW
7130 Blanket bogs (* if active bog)	8	Unfavourable - Bad	Stable	GW
7230 Alkaline fens	4	Unfavourable - Bad	Stable	GW
7140 Transition mires and quaking bogs	3	Unfavourable - Bad	Stable	SW, GW
7120 Degraded raised bogs still capable of natural regeneration	2	Unfavourable - Bad	Improving	SW, GW
7210 Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i>	1	Unfavourable - Bad	Improving	GW
7220 Petrifying springs with tufa formation (<i>Cratoneurion</i>)	1	Unfavourable - Bad	Deteriorating	GW
Rocky habitats and caves				
8110 Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>)	2	Unfavourable - Inadequate	Improving	-
8220 Siliceous rocky slopes with chasmophytic vegetation	2	Unfavourable - Inadequate	Stable	-
8330 Submerged or partially submerged sea caves	2	Unfavourable - Inadequate	Stable	MW
8120 Calcareous and calcshist screes of the montane to alpine levels (<i>Thlaspietea rotundifolii</i>)	1	Unfavourable - Bad	Stable	-
8210 Calcareous rocky slopes with chasmophytic vegetation	1	Unfavourable - Bad	Improving	-
8240 Limestone pavements	1	Unfavourable - Bad	Improving	-
Forests				
91A0 Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	13	Unfavourable - Bad	Stable	-
91D0 Bog woodland	3	Unfavourable - Inadequate	Improving	GW

Habitat	Count	Condition Status	Trend	Water Dependency
91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>)	3	Unfavourable - Bad	Stable	SW, GW
9180 <i>Tilio-Acerion</i> forests of slopes, screes and ravines	2	Unfavourable - Bad	Stable	-

Table 4-5: Protected SAC Species in Northern Ireland, the number of sites in which they occur (Count) and their Status (Condition and Trend). Water dependency (Mayes, 2008) is GW (groundwater), MW (marine water), SW (surface water). – is used where there is no specified water dependency.

Common Name	Scientific Name	Count	Condition	Trend	Water Dependency
Invertebrates: Molluscs					
1029 Freshwater pearl mussel	<i>Margaritifera margaritifera</i>	1	Unfavourable - Bad	Deteriorating	SW
1014 Narrow-mouthed whorl snail	<i>Vertigo angustior</i>	1	Unfavourable - Inadequate	Deteriorating	GW
Invertebrates: Arthropods					
1065 Marsh fritillary	<i>Euphydryas aurinia</i>	5	Unfavourable - Inadequate	Stable	-
1092 White-clawed crayfish	<i>Austropotamobius pallipes</i>	1	Unfavourable - Bad	Deteriorating	SW, GW
Vertebrates: Fish					
1106 Atlantic salmon	<i>Salmo salar</i>	5	Unfavourable - Inadequate	Stable	SW, MW
Vertebrates: Mammals					
1355 Otter	<i>Lutra lutra</i>	6	Favourable	Stable	SW, MW
1365 Harbour seal	<i>Phoca vitulina</i>	4	Unfavourable - Inadequate	Unknown	MW
1351 Harbour porpoise	<i>Phocoena phocoena</i>	3	Unknown	Unknown	MW
1364 Grey seal	<i>Halichoerus grypus</i>	2	Favourable	Improving	MW
1349 Common bottlenose dolphin	<i>Tursiops truncatus</i>	1	Unknown	Unknown	MW
Lower Plants					
1395 Petalwort	<i>Petalophyllum ralfsii</i>	1	Unfavourable - Bad	Deteriorating	GW
Higher Plants					
1528 Marsh saxifrage	<i>Saxifraga hirculus</i>	3	Favourable	Stable	GW

Table 4-6: Protected SPA Species in Northern Ireland, the number of sites in which they occur (Count) and their Status (BoCCI4 listing).

Common Name	Scientific Name	Count	BoCCI4 List
Auks			
Black guillemot	<i>Cephus grylle</i>	1	Amber
Guillemot	<i>Uria aalge</i>	1	Amber
Razorbill	<i>Alca torda</i>	1	Red
Puffin	<i>Fratercula arctica</i>	1	Red
Cormorants & Shags			
Cormorant	<i>Phalacrocorax carbo</i>	2	Amber
Shag	<i>Phalacrocorax aristotelis</i> ¹¹	1	Amber
Crows			
Chough	<i>Pyrrhocorax pyrrhocorax</i>	1	Amber
Divers			
Red-throated diver	<i>Gavia stellata</i>	2	Amber
Ducks, Geese & Swans			
Light-bellied brent goose	<i>Branta bernicla hrota</i>	7	Amber
Eider	<i>Somateria mollissima</i>	3	Red
Whooper swan	<i>Cygnus cygnus</i>	3	Amber
Bewick's swan	<i>Cygnus columbianus bewickii</i>	2	Red
Greylag goose	<i>Anser anser</i>	2	Amber
Mallard	<i>Anas platyrhynchos</i>	2	Amber
Mute swan	<i>Cygnus olor</i>	2	Amber
Shelduck	<i>Tadorna tadorna</i>	2	Amber
Teal	<i>Anas crecca</i>	2	Amber
Wigeon	<i>Anas penelope</i> ¹²	2	Amber
Gadwall	<i>Anas strepera</i>	1	Amber
Goldeneye	<i>Bucephala clangula</i>	1	Red
Pochard	<i>Aythya ferina</i>	1	Red
Red-breasted merganser	<i>Mergus serrator</i>	1	Amber
Scaup	<i>Aythya marila</i>	1	Red
Shoveler	<i>Anas clypeata</i> ¹³	1	Red

¹¹ Now known as *Gulosus aristotelis*

¹² Now known as *Mareca penelope*

¹³ Now known as *Spatula clypeata*⁷

Common Name	Scientific Name	Count	BoCCI4 List
Tufted duck	<i>Aythya fuligula</i>	1	Amber
Falcons			
Peregrine	<i>Falco peregrinus</i>	1	Green
Merlin	<i>Falco columbarius</i>	1	Amber
Grebes			
Great crested grebe	<i>Podiceps cristatus</i>	4	Amber
Little grebe	<i>Tachybaptus ruficollis</i>	1	Green
Gull & Terns			
Common tern	<i>Sterna hirundo</i>	7	Amber
Arctic tern	<i>Sterna paradisaea</i>	5	Amber
Sandwich tern	<i>Sterna sandvicensis</i>	5	Amber
Common gull	<i>Larus canus</i>	1	Amber
Herring gull	<i>Larus argentatus</i>	1	Amber
Kittiwake	<i>Rissa tridactyla</i>	1	Red
Lesser black-backed gull	<i>Larus fuscus</i>	1	Amber
Roseate tern	<i>Sterna dougallii</i>	1	Amber
Kites, Hawks & Eagles			
Hen harrier	<i>Circus cyaneus</i>	2	Amber
Oystercatchers			
Oystercatcher	<i>Haematopus ostralegus</i>	2	Red
Petrels & Shearwaters			
Manx shearwater	<i>Puffinus puffinus</i>	2	Amber
Fulmar	<i>Fulmarus glacialis</i>	1	Amber
Plovers			
Golden plover	<i>Pluvialis apricaria</i>	3	Red
Grey plover	<i>Pluvialis squatarola</i>	2	Red
Ringed plover	<i>Charadrius hiaticula</i>	2	Amber
Lapwing	<i>Vanellus vanellus</i>	1	Red
Rails, Crakes & Coots			
Coot	<i>Fulica atra</i>	1	Amber
Sandpipers, Snipes & Phalaropes			
Redshank	<i>Tringa totanus</i>	4	Red

Common Name	Scientific Name	Count	BoCCI4 List
Black-tailed godwit	<i>Limosa limosa</i>	2	Red
Dunlin	<i>Calidris alpina</i>	2	Red
Knot	<i>Calidris canutus</i>	2	Red
Bar-tailed godwit	<i>Limosa lapponica</i>	1	Red
Curlew	<i>Numenius arquata</i>	1	Red
Greenshank	<i>Tringa nebularia</i>	1	Green
Turnstone	<i>Arenaria interpres</i>	1	Amber



5 Summary of Stage 1 AA Screening

The AA Screening report (see Appendix A) identified that Uisce Éireann as a public authority is required under the Habitat Regulations to screen all of their plans and projects and that the Draft WSSP 2050 was therefore subject to the requirements of the Regulations.

It was also noted that the Draft WSSP 2050 is not directly connected to or necessary to the management of any European Site.

The AA Screening report concluded that LSEs were possible as a result of the Draft WSSP 2050. The report identified that the Draft WSSP 2050 will not itself, being a high-level plan, result in LSEs. However, the types of activities that UÉ will be responsible for during and resulting from the implementation of the Draft WSSP 2050 may do.

The report also categorised the activities of UÉ that the Draft WSSP 2050 will support into two broad groups and further considered specific activities and impacts pathways. These impact pathways are also considered further in this AA, in Section 6.3.

Given the strategic nature of the Draft WSSP 2050 and the current stage of its preparation at the time of the AA Screening Report, it was concluded that all European Sites across Ireland and Northern Ireland were required to be screened in as, in the absence of more detailed information on the Draft WSSP 2050, the precautionary principle must be applied.

It was therefore concluded that, in accordance with Article 6(3) of the Habitats Directive, a Stage 2 AA of the Draft WSSP 2050 would be required.



6 Appropriate Assessment

6.1 Introduction

The AA identifies and examines the implications of the WSSP 2050 for the sites and features in Ireland previously identified as well as potential implications for sites in Northern Ireland where it is identified in the AA that they are functionally linked. The AA is undertaken in-combination with other plans. The full list of plans is presented in Section 7. Given the strategic nature of the WSSP 2050 consideration has been given to only other plans on a similarly strategic scale.

This AA examines and assesses the strategic objectives, strategic aims and the actions associated with them against the European Sites identified in Section 4 (Ecological Baseline/Site Overview). The AA also takes into account Uisce Éireann's obligation to comply with all environmental legislation and government policies. As stated above in Section 5, all European Sites across Ireland and Northern Ireland are included in this AA.

6.2 Approach to this Assessment

6.2.1 General Approach

The WSSP 2050 is a long-term strategic plan to support growth, protect the environment and deliver resilient water services for Uisce Éireann customers for the next 25 years. It will influence the future provision of water and wastewater services in Ireland through the development and implementation of other, lower tiered plans. The actual or likely effects of implementing the WSSP 2050, especially in the absence of detailed proposals that will necessarily follow adoption of the Plan, are inevitably uncertain. It is, however, conceivable that the lower tier plans could have an effect on European Sites, including transboundary effects, although it is not possible to say where, when or how these effects may occur. This is due to the wide scope of the Draft WSSP 2050 and its position in the planning hierarchy.

Projects that may flow from the provisions of the WSSP 2050 will be subject to detailed, statutory assessment for their effects on European Sites, and will only be permitted if they meet the first two tests of the Habitats Regulations. Nevertheless, it is not appropriate to delegate consideration of the effects of plans on European Sites to lower tier plan and/or project assessment level, or to rely solely on a general policy in a plan to protect European Sites.

The assessment also takes into account guidance provided in Tyldesley and Associates (2015) in which general policy statements are concluded as having no conceivable effects as they set out a strategic aspiration on a certain issue. Any projects or plans referred to within the WSSP 2050 but not proposed by the Plan can also not be assessed; for instance, plans where the WSSP 2050 plays no role in their delivery. This does not exclude plans which form part of the in-combination assessment, however. Elements of the WSSP 2050 that are intended to protect the natural environment can also normally be concluded as having no adverse effects although there may conceivably be situations where improvements to the natural environment may have unintended consequences.

In undertaking this AA, three main steps were followed:

- Impact Prediction
- Assessment of Effects
- Mitigation Measures

6.2.2 In-Combination Assessment

As indicated above, the AA is undertaken in-combination with other plans as well as 'within-plan' in-combination effects. The assessment of in-combination effects for this AA focused on potential effects between elements of the WSSP 2050 and other plans. As the WSSP 2050 is a high-level plan it does not

determine the precise location of any development or intervention. It is likely that a further assessment of in-combination effects will be required to be undertaken as lower tier plans and projects are developed.

There could be many other plans/projects which, theoretically, could interact with the WSSP 2050. However, given the strategic nature of the plan a pragmatic approach was undertaken in carrying out the assessment and only similar high-level/strategic plans were included i.e. plans at the same level in the planning hierarchy.

Uisce Éireann plans such as *National Water Resources Plan Framework Plan* (published in 2021) and the *National Wastewater Sludge Management Plan* (published in 2016) fall under the previous WSSP and are outcomes of WSSP objectives. There were therefore not included within the in-combination assessment.

Details of all plans included in the assessment and a commentary associated with the plans is provided in Section 7, Table 7-1. In total, five plans were identified where in-combination effects were conceivable, but not necessarily identifiable.

6.2.3 Mitigation

Mitigation measures may be necessary to remove, avoid or reduce the impacts identified in the appropriate assessment to a level where they will no longer affect the site. As the WSSP 2050 is a strategic document specific impacts on specific European Sites are unlikely to be identified and overarching measures to address any potential adverse effects are likely to be more appropriate.

Examples of mitigation measures which might be applied to the WSSP 2050 demonstrate no adverse effect on the integrity of any European site include, but are not limited to:

- Deletion of the policy/proposal/action.
- Changing the nature or type of the policy/proposal/action.
- Specific policy restrictions or caveats.
- Prescribing how adverse effects on site integrity will be avoided by mitigation measures in a lower tier plan, which would be confirmed by a detailed AA at that level.

Deleting or amending individual elements of the policy/proposal/action which would probably result in adverse effects when tested at a lower tiered stage.

6.3 Impact Sources and Effects Pathways

As stated, activities of UÉ were categorised into two broad groups, and these related to either water supply or wastewater treatment (Table 6-1). Other activities with potential for impacts include water conservation and demand management, catchment management and other supporting or associated measures as well as property management.

Table 6-1: General Activities of Uisce Éireann

General Activity	Specific Activities
Water Supply	<p>Raw Water abstraction (from surface or groundwater).</p> <p>Treatment of raw water to a potable water standard (the level of treatment required will depend on the quality of raw water abstracted).</p> <p>Storage of raw and treated water.</p> <p>Distribute treated water to customers through a pipe network.</p> <p>Water treatment residuals management.</p> <p>Construction, operation, maintenance and management of the above.</p>

General Activity	Specific Activities
Wastewater Treatment	<p>Collection of wastewater from customers connected to the public wastewater sewer network.</p> <p>Collection and treatment of surface water where surface water drains are currently connected to the public sewer network.</p> <p>Treatment of wastewater to an acceptable standard set by legislation (the level of treatment required will depend on the type of receiving water and its assimilative capacity).</p> <p>Discharging treated wastewater to surface or groundwater under licence/certification.</p> <p>Wastewater sludge management.</p> <p>Construction, operation, maintenance and management of the above</p>

Table 6-2 outlines the possible likely significant effects associated with the WSSP 2050. The implementation of the WSSP 2050 may give rise to measures that, in the absence of mitigation, could result in a variety of possible effect pathways including, but not limited to:

- species mortality;
- habitat loss and/or fragmentation;
- barriers to species movement;
- disturbance (noise, vibration, movement, lighting);
- changes in water quality;
- changes in hydrology or hydrogeology; and
- transfer of non-native species.

Impacts may be short-term or long-term and, in some cases, short-term impacts may have long term effects on a qualifying interest (a species or a habitat). More information on possible effects pathways and impacts is provided below. A summary of impacts and potential LSEs is presented in Table 6-2.

Species Mortality

Species mortality may occur during infrastructure construction activities or as a result in changes to water quality or quantity. Mortality may also occur as a result of the loss of prey species or through the fragmentation of habitats resulting in barriers to species movement. Freshwater pearl mussel is at risk from habitat deterioration including sedimentation and nutrient enrichment.

Habitat Loss/Fragmentation and Barriers to Movement

New infrastructure may result in the loss and/or fragmentation of habitat (including habitat that supports qualifying interests). It may also create barriers to movement of species, such as salmon, resulting in loss or changes to populations. These impacts may also affect the prey species of qualifying interests.

New or increased water abstraction may also result in the loss and/or fragmentation of habitats. Habitats and species particularly at risk would be those partly or fully dependent on ground and/or surface water sources. Effects could be short- to medium-term (for example during periods of drought) or long-term.

Disturbance

The construction of new infrastructure may lead to the disturbance of species altering their populations and/or distribution. Disturbance may take the form of, for example, noise and vibration, lighting and movement. This disturbance could affect terrestrial or aquatic animal species across a range of habitats and locations. Disturbance may also cause barriers to movement which result in reduced availability of habitats and fragmentation of populations. Depending on the type of infrastructure, disturbance could be short-term or long-term.

Changes in Water Quality

Changes in water quality may occur for a variety of reasons including spillages and run-off, sedimentation and wastewater discharges. These changes may occur during construction of new infrastructure or during operation as a result of changes in water flows (pathways). Changes in water quality may result in the mortality of qualifying species and/or their prey. It may also result in the loss of qualifying or supporting habitats. Many habitats and species have had impacts from wastewater and/or urban run-off identified as a specific pressure or threat including various lake habitats, water courses and freshwater pearl mussel, brook lamprey and slender naiad.

Changes in Hydrology/Hydrogeology

Hydrological changes may directly affect aquatic habitats changing the ecological functionality of systems and the species they support. Hydrological changes may also alter the distribution of habitats thus affecting the distribution and population of species. If sufficiently large they could potentially lead to changes in coastal processes thus affecting marine features such as submerged sandbanks and reefs, and the species they support. Hydrological/hydrogeological changes may result from new or enhanced abstractions, or from new infrastructure. As a large proportion of the protected habitats and species are dependent on ground and/or surface water sources, hydrological/hydrogeological changes could have an effect across many areas and the functioning of the systems they support.

Transfer of Non-Native Species

The distribution and transfer of water and the collection, treatment and discharge of wastewater may lead to the transfer of non-native species. If invasive, these species may alter habitats or displace species. These changes may directly affect qualifying habitats and species or the ecological functionality of systems.

Table 6-2: Possible Likely Significant Effects associated with the Related Activities of the WSSP 2050

WSSP Related Activity	Potential Impacts	Potential LSE and Pathways
New or enhanced water abstraction from surface water or groundwater locations.	Reduction of habitat area including complete loss as well as habitat change. Reduction in species population (including prey species) altering distribution or complete loss. Hydrogeological changes.	Where abstractions are required there is potential for direct, indirect, construction, operational and cumulative effects on SACs and SPAs in the absence of mitigation. Aquatic and water dependent receptors would be most at risk. Habitats and the species supported by them may change resulting in population and distribution changes. This may also affect the prey species of qualifying interests. All sites which contain surface and/or groundwater dependent habitats and species that are hydrologically linked to abstractions would be potentially affected.

WSSP Related Activity	Potential Impacts	Potential LSE and Pathways
Development of new water services infrastructure including reservoirs, pipelines and wastewater treatment plants.	<p>Species mortality (including prey species).</p> <p>Loss/change in habitat area.</p> <p>Disturbance (short-term or long-term) to species.</p> <p>Habitat fragmentation including barrier effects to species movement.</p> <p>Hydrological/hydrogeological changes to aquatic environments.</p> <p>Transfer of invasive non-native species.</p>	<p>Changes in hydrology potentially altering the aquatic environment and impacting on aquatic receptors.</p> <p>Habitats and the species supported by them may change resulting in population and distribution changes. This may also affect the prey species of qualifying interests.</p> <p>Invasive non-native species may result in habitat and/or species replacement altering ecological functionality of sites.</p> <p>Potential for direct, indirect, construction, operational and cumulative effects on SACs and SPAs in the absence of mitigation.</p>
Discharges from drinking water treatment plants (DWTP)	<p>Species mortality (including prey species).</p> <p>Reduction of habitat area.</p> <p>Reduction in species density.</p>	<p>Discharges from DWTP may affect water quality which can directly result in species mortality.</p> <p>There is potential for direct and indirect effects on SACs and SPAs that contain water dependent habitats and species which are hydrologically linked to DWTPs.</p> <p>Habitats and the species supported by them may change resulting in population and distribution changes. This may also affect the prey species of qualifying interests. Aquatic and water dependent receptors would be most at risk.</p> <p>Potential for direct and indirect, operational and cumulative effects on SACs and SPAs in the absence of mitigation.</p>
Discharge of treated wastewater.	<p>Reduction of habitat area.</p> <p>Reduction in species density.</p>	<p>There is potential for direct, indirect, construction, operational and cumulative effects on SACs and SPAs that contain water dependent habitats and species which are hydrologically linked to wastewater treatment plants (WwTPs).</p> <p>Habitats and the species supported by them may change resulting in population and distribution changes. This may also affect the prey species of qualifying interests. Aquatic and water dependent receptors would be most at risk.</p> <p>Potential for direct, indirect, operational and cumulative effects on SACs and SPAs in the absence of mitigation.</p>

6.4 Appropriate Assessment

6.4.1 Strategic Objectives

The four strategic objectives are listed below:

- 1. Safe and reliable drinking water:** We ensure the quality of our water supplies are safe, and we deliver a water service that customers, communities, and the broader economy can rely on.
- 2. Support our customers, communities and the economy:** We strive to provide an excellent service to our customers, and work with our stakeholders to deliver aligned priorities and support sustainable growth.
- 3. Protect and restore our environment:** We deliver a reliable water and wastewater service that protects the environment, and we support a healthy environment by enhancing habitats and ecosystems.
- 4. Sustainable services fit for the future:** We make decisions for the long-term which enable us to adapt and ensure our assets remain resilient.

They are high-level strategic objectives and are general statements of policy. They express expectations of Uisce Éireann for when they consider future proposals. For such general policy statements which show the general intention of UÉ it is not possible to identify when, where or how any effects on the Natura 2000 Network may occur. It is concluded that these strategic objectives, in themselves, are not likely to have an adverse effect on a European Site. However, it should be noted that strategic objective 3 (*Protect and restore the environment*) may provide opportunities for positive effects on European Sites.

When examining the high-level strategic objectives in relation to an adverse effect on a European Site this was also done in-combination with plans (see Section 7). As it was concluded that the strategic objectives alone could have no conceivable effect on a site it follows that it is not possible for an in-combination effect to occur.

6.4.2 Strategic Aims

Table 6-3 assesses the 14 strategic aims associated with each strategic objective. All strategic aims are general policy statements. Whilst more specific than the over-arching strategic objectives they do not indicate where, when or how the aspects of the four strategic objectives may be implemented. However, the actions (Tier 1) that underlie them require further assessment to ensure any possible adverse effects are recognised, and that mitigation strategies for these effects are identified.

The strategic aims associated with *Protect and restore our environment* are likely to benefit European Sites although the timescales over which these benefits may occur cannot be determined. Furthermore, it is conceivable that in the delivery of the associated strategic aims (the actions and further lower-tier actions and plans) LSEs on specific species and habitat interests may inadvertently occur.

When examining the strategic aims for an adverse effect on a European Site this was also done in combination with plans (see Section 7). As it was concluded that the strategic aims alone could have no conceivable effect on a site it follows that it is not possible for an in-combination effect to occur.





Table 6-3: AA Commentary and Conclusions for the Strategic Aims

Strategic Objective	Strategic Aims	AA Commentary	AA Conclusion	Mitigation
1: Safe and Reliable Drinking Water	1. Ensuring safe drinking water.	These strategic aims are general policy statements. It is not known where, when or how the aspects of the various objectives may be implemented, or where any adverse effects may occur, or which European Sites, if any, may be affected.	Strategic aim 1 will have no conceivable effects on any European Site.	None required
	2. Delivering reliable water supplies.		Strategic aim 2 will have no conceivable effects on any European Site.	None required
	3. Conserving our precious resources.	These strategic aims can therefore be removed from further assessment. However, the actions (Tier 1) that underlie them require further assessment to ensure any possible adverse effects are identified.	Strategic aim 3 will have no conceivable effects on any European Site.	None required
2. Support our Customers, Communities and the Economy	4. Delivering for customers.	These strategic aims are general policy statements. It is not known where, when or how the aspects of the various objectives may be implemented, or where any adverse effects may occur, or which European Sites, if any, may be affected.	Strategic aim 4 will have no conceivable effects on any European Site.	None required
	5. Engaging with communities.		Strategic aim 5 will have no conceivable effects on any European Site.	None required
	6. Providing for growth.	These strategic aims can therefore be removed from further assessment. However, the actions (Tier 1) that underlie them require further assessment to ensure any possible adverse effects are identified.	Strategic aim 6 will have no conceivable effects on any European Site.	None required
3. Protect and Restore our Environment	7. Protecting our water environment.	These strategic aims are general policy statements. It is not known where, when or how the aspects of the various objectives may be implemented, or where any adverse effects may occur, or which European Sites, if any, may be affected. However, protecting and restoring the water environment and delivering on WFD objectives should ultimately benefit European Sites.	Strategic aim 7 will have no conceivable effects on any European Site.	None required
	8. Playing our part under the Water Framework Directive.		Strategic aim 8 will have no conceivable effects on any European Site.	None required
	9. Contributing to positive biodiversity.	These strategic aims can therefore be removed from further assessment. However, the actions (Tier 1) that underlie them require further assessment to ensure any possible adverse effects are identified.	Strategic aim 9 will have no conceivable effects on any European Site.	None required
4. Sustainable Services Fit for the Future	10. Achieving net zero carbon.	These strategic aims are general policy statements. It is not known where, when or how the aspects of the various objectives may be implemented, or where any adverse effects may occur, or which European Sites, if any, may be affected.	Strategic aim 10 will have no conceivable effects on any European Site.	None required
	11. Adopting circular approaches.		Strategic aim 11 will have no conceivable effects on any European Site.	None required
	12. Managing our assets.		Strategic aim 12 will have no conceivable effects on any European Site.	None required
	13. Gaining value from innovation.	These strategic aims can therefore be removed from further assessment. However, the actions (Tier 1) that underlie them require further assessment to ensure any possible adverse effects are identified.	Strategic aim 13 will have no conceivable effects on any European Site.	None required
	14. Securing long-term funding		Strategic aim 14 will have no conceivable effects on any European Site.	None required

6.4.3 Actions of the WSSP

An assessment of the actions that come under the strategic objectives and strategic aims can be seen in Table 6-4, Table 6-5, Table 6-6 and Table 6-7.

Colour coding is used in the AA tables in to indicate where effects may occur, and mitigation measures be required as below.

	Actions concluded to have no conceivable effects on European Sites.
	No conceivable effects, but lower tier plans/interventions would be required to comply with the Habitats Regulations.
	Existing mitigation measures already identified in lower tier plans require to be complied with to avoid adverse effects on European Sites.
	Actions concluded to potentially have beneficial effects on European Sites.

For 16 actions it was concluded that there would be no conceivable effects on European Sites and no actions were identified as resulting in adverse effects. For one action, the potential for positive effects on European sites was identified and no mitigation was required. However, 14 actions were associated with the production of lower tier plans, the development of interventions, or the identification of a need for interventions, and it was conceivable that such lower tier plans/interventions could result in effects on sites and, as a result, the need for a requirement to comply with the Habitats Regulations was identified as mitigation i.e. undergo AA Screening/AA where identified and appropriate. For two actions where positive effects on biodiversity could occur, it was concluded that outcomes of the actions would still be required to comply with the Habitats Regulations. Two actions were identified where mitigation measures were already in place to prevent adverse effects. In total, seven actions were also identified where it was concluded that beneficial effects on European Sites were likely, although outcomes of six of these actions could also conceivably result in adverse effects on European sites. Further details are given below for each strategic objective.

For all incidences where lower tier plans/interventions could result in effects on sites and therefore AA Screening/AA would be required, it would also be necessary to consult NED to ensure there would be no potential for impacts/effects in on European Sites (including Ramsar sites) Northern Ireland.

Actions of Strategic Objective 1

For three of the nine actions associated with *strategic objective 1: Safe and Reliable Drinking Water* no mitigation was identified as there would be no conceivable effects from these actions (Table 6-4). This was because all elements of the proposed actions did not lead to development or other change which might have a conceivable effect on European Sites; no links or pathways to sites and their qualifying interests could be identified.

Five actions were identified as requiring lower tier plans and/or interventions to comply with the Habitats Regulations (i.e. undergo AA Screening/AA as appropriate). This included one action (action 1.9) which was also identified as having the potential to result in a positive effect on European Sites through a reduction in water abstraction. This would be potentially beneficial to those sites with habitats and species dependent on surface water or groundwater.

For one action (action 1.4) it was recognised that existing mitigation measures already identified within a lower tier plan would need to be adhered to.

Actions of Strategic Objective 2

For five of the eight actions associated with *strategic objective 2: Support our Customers, Community and the Economy* no mitigation was identified as there would be no conceivable effects from these actions (Table 6-5).

Three actions were identified as requiring lower tier plans and/or interventions to comply with the Habitats Regulations.

One action (*action 2.5: Continue to develop amenity value in UÉ assets with local communities*) could conceivably result in effects on European Sites although the action does not identify which assets might be developed. However, the action will be identifying such assets as part of its outcomes and therefore there is clearly a link to possible effects, although how, where or when those effects may occur cannot be established. Therefore, no specific mitigation can be applied beyond any developments that might result from the action being required to comply with the Habitats Regulations and undergo AA Screening/AA where necessary.

No actions were identified as having the potential to result in positive effects on European Sites.

Actions of Strategic Objective 3

The *strategic objective 3: Protect and Restore our Environment* is aimed at delivering a reliable water and wastewater service that protects the environment as well as supporting a healthy environment by enhancing habitats and ecosystems. The eight actions associated with it would therefore be expected to likely to generally present opportunities to improvements to the condition of European Sites. Furthermore, given that some waterbodies – for example Lough Melvin SAC, River Finn/River Foyle and Tributaries SAC, Lough Oughter and Associated Loughs/Upper Lough Erne SAC and Ramsar site – have transboundary connectivity there are implications for sites in both Ireland and Northern Ireland.

Five of the eight actions were identified as potentially having beneficial effects on European Sites (Table 6-6). However, for three of these actions (action 3.3, 3.5 and action 3.6) outcomes of the action(s) may result in new plans which could conceivably result in adverse effects. For these actions, lower tier plans and/or interventions would be required to comply with the Habitats Regulations and undergo AA where necessary. Furthermore, *action 3.3 Manage our water service assets and operations to reduce the risk of pollution threats to water bodies* requires that risk assessments, implementing preventative measures, and developing contingency plans and incident response processes be delivered as part of the action. As a result, with those assessments and processes in place, no mitigation measures additional to those already identified are required for this action.

For two actions (action 3.1 and action 3.2) it was concluded that they would, in themselves, be unlikely to result in any conceivable effects on European Sites. However, both actions required the development of lower tier frameworks/plans/outcomes which could conceivably result in effects, although it is not known where, when or how such effects may occur. For these two actions, lower tier plans and/or interventions will be required to comply with the Habitats Regulations and undergo AA where necessary.

Two actions (action 3.7 and 3.8) were identified as potentially having beneficial effects on European sites but all outcomes of the actions would still be required to comply with the Habitats Regulations and undergo AA where necessary.

Actions of Strategic Objective 4

For eight of the 10 actions associated with *strategic objective 4: Sustainable Services Fit for the Future* no mitigation was identified as there would be no conceivable effects from these actions (Table 6-7). This was because the actions were aimed at developing strategies or administrative approaches.

This included *action 4.9: Quantify and articulate long-term capital and operational financial investment needs for our water and wastewater assets*. This action is primarily administrative and would not be identifying the need for new infrastructure/development itself. However, it is likely that outcomes of the action would impact on other actions of the WSSP 2050 where development or other changes comprise part of those actions' outcomes. Such new infrastructure/development would be subject to examination in lower tier plans, prior to the identification of the new infrastructure/development itself, and might conceivably have the potential for

effects on European Sites and would therefore require AA Screening/AA where necessary. However, that process would be undertaken as part of the other actions of the WSSP 2050 and not as part of action 4.9.

One action (action 4.1) was identified as requiring lower tier plans and/or interventions to comply with the Habitats Regulations. Action 4.1 sets out a framework for the development of a Net Zero Road Map. Whilst the action is mainly aimed at developing a strategy and associated initiatives, it is likely to result in the development of lower tier plans (as a result of the initiatives for instance) which would require to be assessed under the Habitats Regulations and undergo AA where necessary.

One action (*action 4.3: Review and implement the National Wastewater Sludge Management Plan*) was of note as this involved the National Wastewater Sludge Management Plan (NWSMP) which itself has been subject to NIS (in 2016) and was produced as part of the previous iteration of the WSSP. The NIS identified various mitigation measures including ensuring that *"any project and any associated works, individually or in combination with other plans or projects, are subject to Appropriate Assessment Screening to ensure there are no likely significant effects on the integrity (defined by the structure and function) of any Natura 2000 site(s) and that the requirements of Article 6(3) and 6(4) of the EU Habitats Directive are fully satisfied."* Action 4.3 of the WSSP 2050 will be required to conform with existing mitigation measures of the NWSMP and it was concluded that with that in place, further effects on European Sites would not be likely and no additional mitigation measures would be required.



Table 6-4: Appropriate Assessment of Actions of Strategic Objective 1: Safe and Reliable Drinking Water

Strategic Aims (Priorities)	Action	AA Commentary	AA Conclusion	Mitigation
1: Ensuring safe drinking water: We will manage the safety and quality of drinking water from source to tap to protect human health.	Action 1.1: Undertake risk assessments across our supplies and implement appropriate measures to manage risk.	<p>The action provides for the development and implementation of Drinking Water Safety Plans (DWSPs) to assess risk. The plans, including Asset Management Plans, will be used to inform the operational, maintenance, or capital interventions that will mitigate the identified risks.</p> <p>The development and implementation of such plans do not in themselves result in effects on European Sites, although the recommendations of the plans, particularly the Asset Management Plans, may require further work/proposals such as new infrastructure. Such new infrastructure could conceivably result in effects on European Sites but it is not known where, when or how such effects may occur. Furthermore, such proposals would be required to conform to the protection of European Sites. In addition, the WSSP 2050 does not constrain how the DWSPs, or other plans, would be drafted and implemented.</p>	<p>Action 1.1 will have no effects on any European Site, although lower tier proposals and/or interventions may conceivably result in adverse effects.</p>	<p>Lower tier proposals and/or interventions will be required to comply with the Habitats Regulations and undergo AA where necessary.</p>
	Action 1.2: Conform to Drinking Water Directive and other legislative requirements.	<p>The action provides for the development of monitoring programmes to extend beyond compliance aspects. The programme will be tailored to the outcomes of hazard identification and risk assessments within the supply system undertaken as part of the DWSPs. The action will also allow the development of procedures to investigate and evaluate contaminants of emerging concern.</p> <p>The development and implementation of such programmes and procedures will not have any effects on European Sites, although the information gathered may assist in understanding potential risks and impacts to such sites and furthermore could inform the need for mitigation which may be outside the remit of UÉ.</p>	<p>Action 1.2 will have no effects on any European Site, although lower tier plans and/or interventions may conceivably result in adverse effects.</p>	<p>Lower tier plans and/or interventions will be required to comply with the Habitats Regulations and undergo AA where necessary.</p>
	Action 1.3: Coordinate integrated catchment management measures and champion nature-based solutions for improving source water quality.	<p>UÉ will prioritise nature-based solutions and develop and deliver a communication campaign to champion source protection. As part of this aim, UÉ will conduct a pilot study employing a catchment management approach for source protection that encompasses nature-based solutions.</p> <p>The development of such solutions including conducting a pilot study could conceivably have an effect on a European Site(s) but it is not known where, when or how such effects may occur as it is not known how or where such a pilot study may take place. Furthermore, the initiative will be undertaken in collaboration with stakeholders and will be subject to its our assessment under the Habitats Regulations. In addition, the WSSP 2050 does not constrain how the solutions and pilot study will be implemented.</p>	<p>Action 1.3 will have no effects on any European Site, although lower tier plans and/or interventions may conceivably result in adverse effects.</p>	<p>Lower tier plans and/or interventions will be required to comply with the Habitats Regulations and undergo AA where necessary.</p>
2: Delivering Reliable water supplies: We will improve our assets and sources to ensure our supplies are robust enough to meet our customers' needs at the target level of service	Action 1.4: Implement and continue to review our NWRP, delivering improvements in water supply infrastructure to ensure resilient supplies into the future.	<p>The NWRP was completed in December 2023 and is a long-term plan designed to secure a safe, sustainable and reliable drinking water supply for customers across Ireland over the next 25 years. The NWRP Framework Plan was subject to the Habitats Regulations through an AA which concluded no AESI with mitigation in place. The Regional Plans which sit below the Framework Plan were also subject to SEA and AA. Any review (and continued implementation) of the NWRP, including the Regional Plans, will be required to take into account the conclusions and recommendations of the NIS and future AA.</p>	<p>Action 1.4 will have no effects on any European Site, although the NWRP itself could result in adverse effects if mitigation was not in place.</p>	<p>Existing mitigation measures within the NWRP should be adhered to.</p>
	Action 1.5: Develop contingency plans to improve reliability of our water supplies.	<p>The action requires the development of contingency plans, to enhance the reliability of water supplies, particularly in light of vulnerabilities to extreme weather events. As part of the NWRP the supplies at risk during dry weather events was identified and UÉ is currently in the process of developing drought plans for these supplies with a target completion date of 2030. Other contingency plans are/will be developed to address various scenarios, and are committed to a review of flood/extreme weather risk to existing infrastructure/operations. The development of such plans do not in themselves result in effects on European Sites.</p>	<p>Action 1.5 will have no effects on any European Site, although lower tier plans and/or interventions may conceivably result in adverse effects.</p>	<p>Lower tier plans and/or interventions will be required to comply with the Habitats Regulations and undergo AA where necessary.</p>

Strategic Aims (Priorities)	Action	AA Commentary	AA Conclusion	Mitigation
	Action 1.6: Improve operational resilience through preventative measures and developing and implementing improved incident response processes.	The action plans to minimise disruption to supplies through a combination of asset design and operational plans and by implementing enhanced incident response processes. This will include design stages as well as developing operational plans, real-time data and monitoring capabilities, and cyber security improvements.	Action 1.6 will have no conceivable effects on any European Site.	None required.
3: Conserving our precious resources: We will take pressure off our resources through leakage reduction and helping our customers to conserve water.	Action 1.7: Use less water through promoting water conservation to help customers reduce their use.	UÉ is developing a Water Conservation Strategy that incorporates their existing water conservation activities and additional initiatives, and provides a framework to promote water conservation and manage demand. The strategy will seek to better understand demand profile and will include better metering systems.	Action 1.7 will have no conceivable effects on any European Site.	None required.
	Action 1.8: Use less water through developing and implementing an enhanced Water Stewardship Programme.	The action aims to further develop the existing Water Stewardship Programme (which includes identifying on-site water waste or upgrading to water efficient devices) to offer further metrics and work with new cohorts of customers. UÉ will also explore technologies for rainwater harvesting and greywater recycling. The development of the programme, including new metrics, and the exploration of new technologies, would not result in effects on European Sites.	Action 1.8 will have no conceivable effects on any European Site.	None required.
	Action 1.9: Lose less water through delivering leakage reduction.	The "Lose Less" pillar of the NWRP is a fundamental strategy in UÉ's commitment to ensuring the long-term sustainability of water supplies. It involves actions geared toward improving our understanding of leakage, implementing measures to reduce it, and deploying tools to detect and fix leaks. The action intends to build on the existing programme of works/management and develop them further through innovation and new technologies. The continuing management, including reduction, in leaks has the potential to have a positive effect on European Sites through a reduction in water abstraction. However, construction works may be required to reduce leakage and such works could conceivably affect European sites. However, it is not known where, when or how such effects may occur. Furthermore, such interventions would be required to conform to the protection of European Sites.	Action 1.9 has the potential for a positive effect on European Sites, especially groundwater or surface-water dependent sites, through reduced abstraction. However, new infrastructure may conceivably result in adverse effects.	Lower tier plans and/or interventions will be required to comply with the Habitats Regulations and undergo AA where necessary.

Table 6-5: Appropriate Assessment of Actions of Strategic Objective 2: Support our Customers, Community and the Economy

Strategic Aims (Priorities)	Action	Action and AA Commentary	AA Conclusion	Mitigation
4: Delivering for customers: We will put our customers at the heart of what we do and deliver on their needs.	Action 2.1: Understand customer needs and expectations.	<p>UÉ intends to engage with cohorts of the domestic and non-domestic customer base to understand their preferences and expectations. UÉ will embed the insight gained into business planning and operational decisions, using customer feedback to shape long-term goals, investment strategies and daily operations.</p> <p>None of the elements of the action will themselves lead to development or other change and there are no conceivable effects on European Sites, as no links or pathways can be identified.</p>	Action 2.1 will have no conceivable effects on any European Site.	None required.
	Action 2.2: Enhance customer communications to address our customer expectations and provide real-time information to customers on usage, incidents, and water quality.	<p>UÉ intend to enhance their communications with customers. to address our customer expectations and provide relevant, accurate and timely information on planned works, maintenance, upgrades and infrastructure projects. During unplanned Incidents UÉ will keep customers informed about the situation, its impact and the steps to be taken. Activities include further development of UÉ's digital self-service platform.</p> <p>Whilst action 2.2 makes reference to possible projects, they are not informed by the action. As a result, no elements of the action will themselves lead to development or other change and there are no conceivable effects on European Sites, as no links or pathways can be identified.</p>	Action 2.2 will have no conceivable effects on any European Site.	None required.
	Action 2.3: Support our customers to play their part in protecting water as a precious resource and enabling better water services.	<p>The action aims to raise public awareness of the value of water resources and the benefits they deliver for the environment, communities and the economy. The action will provide customers with real time information and self-serve options including the technology to do this.</p> <p>None of the elements of the action will themselves lead to development or other change and there are no conceivable effects on European Sites, as no links or pathways can be identified.</p>	Action 2.3 will have no conceivable effects on any European Site.	None required.
5: Engaging with communities: We will engage with communities at a local level to realise the value from our shared water resources.	Action 2.4: Develop a community education and engagement programme to raise awareness on the value of water and the water services we provide.	<p>UÉ are committed to building upon their community engagement and education activities and programmes, including supporting the education and engagement of primary and secondary school students in water conservation and efficiency. UÉ intend to build on these engagement programmes with communities on projects at assessment, preplanning, planning, build and completion stages.</p> <p>Whilst action 2.4 makes reference to possible projects, they are not informed by the action. As a result, no elements of the action will themselves lead to development or other change and there are no conceivable effects on European Sites, as no links or pathways can be identified.</p>	Action 2.4 will have no conceivable effects on any European Site.	None required.
	Action 2.5: Continue to develop amenity value in our assets with local communities, where safe and appropriate.	<p>The action aims to seek opportunities to explore how UÉ can collaborate with local stakeholders to develop amenity value in suitable UÉ assets where this can be done safely and without compromising the core function of delivering quality water and wastewater services.</p> <p>Whilst action 2.5 does not identify specific assets, it is conceivable that effects on European Sites could occur depending on the location and type of the amenity and the possible development, The action could have transboundary implications.</p>	Action 2.5 does not itself result in effects on European Sites, but opportunities for increased amenity value could lead to increased access and new development.	Lower tier plans and/or interventions will be required to comply with the Habitats Regulations and undergo AA where necessary.

Strategic Aims (Priorities)	Action	Action and AA Commentary	AA Conclusion	Mitigation
6: Providing for growth: We will manage the availability of capacity to support social and economic growth in line with national policy.	Action 2.6: Engage and collaborate with key stakeholders to support national, regional and local planning policy.	<p>UÉ will invest in infrastructure that facilitates well-planned social and economic growth that is based on principles of environmental sustainability and enhanced liveability. Action 2.6 involves designing infrastructure with foresight, and actively engaging with national, regional and local planning authorities, recognising the importance of aligning UÉ investments with Planning Policy. UÉ will support the National Planning Framework (NPF) and its subsidiary plans.</p> <p>Whilst action 2.6 makes reference to possible developments, they are not informed by the Action. However, outcomes of the Action may result in new infrastructure at a later stage. These outcomes could conceivably result in effects on European Sites but it is not known where, when or how such effects may occur. Furthermore, such lower tier plans and/or interventions would be required to conform to the protection of European Sites.</p>	<p>Action 2.6 does not itself result in effects on European Sites, but developments informed by the action may result in new infrastructure which could conceivably result in adverse effects.</p>	<p>Lower tier plans and/or interventions will be required to comply with the Habitats Regulations and undergo AA where necessary.</p>
	Action 2.7: Engage with developers and industry to support delivery of new homes and economic growth.	<p>UÉ will engage with housing and industry stakeholders to support efficient growth, to identify needs and provide support subject to economic and technical feasibility and the provisions of the Connection Charging Policy. This will enable UÉ to understand trends, housing and industry demands and identify areas of growth. UÉ will work closely with developers and other stakeholders to streamline processes, provide technical guidance, and facilitate efficient water and wastewater service connections for development.</p> <p>Whilst action 2.7 makes reference to possible developments, they are not informed by the action. However, outcomes of the Action may result in new infrastructure at a later stage. These outcomes could conceivably result in effects on European Sites but it is not known where, when or how such effects may occur. Furthermore, such lower tier plans and/or interventions would be required to conform to the protection of European Sites.</p>	<p>Action 2.7 does not itself result in effects on European Sites, but outcomes of the action may result in new infrastructure which could conceivably result in adverse effects.</p>	<p>Lower tier plans and/or interventions will be required to comply with the Habitats Regulations and undergo AA where necessary.</p>
	Action 2.8: Develop and embed demand analysis capability to inform, forecast and plan for future investment requirements.	<p>UÉ will undertake a pilot demand analysis study initially and thereafter embed capability, to ensure adequate monitoring and ability to act upon changes in demand. This will inform demand management measures and allow for future forecasting. Robust data will underpin demand analysis and forecasts and help inform investment plans.</p> <p>Whilst the elements of this Action will not conceivably lead to effects on European Sites, information resulting from it could have implications for them in the identification and development of infrastructure at a later stage. However, such developments are not themselves intended outcomes of the Action nor constrained by the Action.</p>	<p>Action 2.8 will have no conceivable effects on any European site.</p>	<p>None required.</p>

Table 6-6: Appropriate Assessment of Actions of Strategic Objective 3: Protect and Restore the Environment

Strategic Aims (Priorities)	Action	AA Commentary	AA Conclusion	Mitigation
7: Protecting our water environment: We will play our part in protecting and restoring our water environment.	Action 3.1: Work with regulators and stakeholders to develop a Wastewater Strategy Framework.	<p>UÉ is developing a National Wastewater Strategy Framework, to manage the collection, treatment and return of treated wastewater to the environment. The framework will provide an understanding of strategic needs and drivers, including environmental priorities. The framework will also help indicate investment needs.</p> <p>This action itself will not lead to any effects on European Sites; the framework will set out approaches and methodologies to develop drainage and wastewater management plans on appropriate spatial scales. However, outcomes of these lower tier plans could conceivably result in effects although it is not known where, when or how such effects may occur.</p>	Action 3.1 does not itself result in effects on any European site, but outcomes of the action may result in new plans which could conceivably result in adverse effects.	Lower tier plans and/or interventions will be required to comply with the Habitats Regulations and undergo AA where necessary.
	Action 3.2: Develop and implement Integrated Urban Wastewater Management Plans.	<p>UÉ in collaboration with local authorities will develop and introduce Integrated Urban Wastewater Management Plans, with shared aims of reducing the pollution load from storm water overflows and urban run-off, developing capacity for growth, and improving climate resilience. UÉ will develop new approaches including modelling, nature based sustainable urban drainage and smart network control.</p> <p>This action itself will not lead to any effects on European Sites. However, the action entails the development of lower tier plans which would conceivably have an effect on European Sites, including transboundary effects.</p>	Action 3.2 does not itself result in effects on any European site, but outcomes of the action may result in new plans which could conceivably result in adverse effects.	Lower tier plans and/or interventions will be required to comply with the Habitats Regulations and undergo AA where necessary.
	Action 3.3: Manage our water service assets and operations to reduce the risk of pollution threats to water bodies.	<p>UÉ will mitigate the potential pollution threats to waterbodies from their water services by conducting risk assessments, implementing preventative measures, and developing contingency plans and incident response processes. This will include managing residuals from water treatment plants. UÉ will also conduct risk assessments to identify potential pollution sources and evaluate their impact on the environment, including risks associated with chemical storage and handling. UÉ will review and update their incident response plans based on new information, incidents, and regulatory changes. As part of this, the EPA's <i>"IPC Guidance Note on Storage and Transfer of Materials for Scheduled Activities"</i> has been fully incorporated into UÉ's design specifications regarding chemical storage and associated pipework.</p> <p>This action itself will not lead to effects on European Sites. However, outcomes of the action have the potential for improvements to the condition of European Sites as a result of improvements in water quality. These benefits may have transboundary implications.</p>	<p>Action 3.3 has the potential for a positive effect on European Sites as a result of improvements in water quality. These positive effects may have transboundary implications.</p> <p>However, outcomes of the action may result in new infrastructure which could conceivably result in adverse effects.</p>	Lower tier plans and/or interventions will be required to comply with the Habitats Regulations and undergo AA where necessary.
8: Playing our part under the Water Framework Directive: We will work with others to progressively deliver on the WFD objectives.	Action 3.4: Protect and restore water bodies through collaboration.	<p>UÉ will work with stakeholders, including data sharing and the development of shared catchment models, to establish the most cost-effective combination of measures to protect and restore water bodies to at least good status.</p> <p>The action itself will not lead to any effects on European Sites. However, outcomes of the Action are aimed at helping to achieve WFD environmental objectives. This would likely benefit European Sites although it is acknowledged that it may not be possible in all cases to achieve WFD objectives. These benefits may have transboundary implications.</p>	Action 3.4 has the potential for a positive effect on European Sites. These positive effects may have transboundary implications.	None required.
	Action 3.5: Manage wastewater services to achieve regulatory requirements.	<p>UÉ will manage wastewater assets to achieve regulatory requirements including compliance with the Urban Waste Water Treatment Directive (UWWTD) and Waste Water Discharge Authorisations. UÉ will also collaborate with stakeholders to develop and implement a monitoring programme to understand the water quality risks to bathing waters and shellfish habitats. UÉ will implement actions to prioritise works and accelerate compliance with UWWTD requirements.</p>	<p>Action 3.5 has the potential for a positive effect on European Sites. These positive effects may have transboundary implications.</p> <p>However, outcomes of the action may result in</p>	Lower tier plans and/or interventions will be required to comply with the Habitats Regulations and undergo AA where necessary.

Strategic Aims (Priorities)	Action	AA Commentary	AA Conclusion	Mitigation
		The action will not lead to adverse effects on European Sites. However, outcomes of the action have the potential for improvements to the condition of European Sites as a result of improvements in water quality. These benefits may have transboundary implications.	new infrastructure which could conceivably result in adverse effects.	
	Action 3.6: Manage water services to achieve regulatory requirements.	<p>UÉ will be required to apply to the EPA for licences above certain thresholds for both new and existing abstractions. UÉ will also have to manage abstractions so they are sustainable and meet the requirements of licence conditions including in-stream flow requirements necessary to support healthy ecosystems. As part of the NWRP, a risk assessment of existing abstractions has been completed. This assessment has allowed UÉ to identify abstractions that may need to be moved away from over time to protect the water environment while ensuring a secure supply for customers.</p> <p>UÉ are also developing a Fish Pass Programme in consultation with Inland Fisheries Ireland to improve local hydromorphological conditions.</p> <p>The action will not lead to adverse effects on European Sites. However, outcomes of the Action have the potential for improvements to the condition of European Sites from reduced impacts at groundwater sensitive locations and the improvement of fish passage. These effects may have transboundary implications.</p>	<p>Action 3.6 has the potential for a positive effect on European Sites as a result of reduced impacts at groundwater sensitive locations and the improvement of fish passage. These positive effects may have transboundary implications.</p> <p>However, outcomes of the action may result in new plans which could conceivably result in adverse effects.</p>	Lower tier plans and/or interventions will be required to comply with the Habitats Regulations and undergo AA where necessary.
9: Contributing to positive biodiversity: We will manage our assets to have biodiversity net gain.	Action 3.7: Manage our assets to have biodiversity 'net gain'.	<p>UÉ developed its own Biodiversity Action Plan (BAP) to detail specific objectives and actions for UÉ to undertake. UÉ is working to ensure biodiversity net gain is achieved across infrastructure projects and will collaborate with stakeholders to deliver projects and activities that promote biodiversity enhancements. The BAP states that, UÉ is obligated to ensure that abstractions and/or discharges do not impact on SACs/SPAs and their nature conservation interests.</p> <p>The action is unlikely to lead to adverse effects on European Sites, and outcomes of the action have the potential for improvements to the condition of European Sites. However, all biodiversity projects will require screening for AA in accordance with the Habitats Directive.</p>	Action 3.7 has the potential for a positive effect on European Sites as a result of biodiversity enhancements. However, projects will be required to comply with the Habitats Regulations.	All biodiversity projects will be required to comply with the Habitats Regulations and undergo AA where necessary.
	Action 3.8: Champion nature-based solutions and catchment measures in the delivery of water and wastewater projects.	<p>UÉ will encourage and promote the identification of opportunities for the incorporation of integrated constructed wetlands, sludge drying reed beds, and other nature-based solutions into wastewater treatment sites. UÉ will collaborate with external stakeholders, landowners and community groups on wider catchment management-based initiatives that result in source water protection.</p> <p>The action will not lead to adverse effects on European Sites. However, outcomes of the action are aimed at improving water quality and therefore the condition of receiving waterbodies. There is therefore the potential for improvements to the condition of European Sites including transboundary locations. However, all solutions/opportunities will require screening for AA in accordance with the Habitats Directive.</p>	<p>Action 3.8 has the potential for a positive effect on European Sites, especially surface-water sites. These positive effects may have transboundary implications.</p> <p>However, solutions/opportunities will be required to comply with the Habitats Regulations.</p>	All solutions/opportunities will be required to comply with the Habitats Regulations and undergo AA where necessary.

Table 6-7: Appropriate Assessment of Actions of Strategic Objective 4: Sustainable Services Fit for the Future

Strategic Aims (Priorities)	Action	AA Commentary	AA Conclusion	Mitigation
10: Achieving net zero carbon: We will progressively work towards achieving net zero carbon services.	Action 4.1: Develop and implement a Net Zero Road Map.	<p>UÉ is developing a Net Zero Roadmap to achieve Net Zero by 2040. The roadmap will set out a strategic plan for eliminating or offsetting greenhouse gas emissions across UÉ's operations. It will include initiatives such as energy efficiency, renewable energy adoption, greenhouse gas reductions including process emissions management and nature-based solutions.</p> <p>The action itself will not lead to any effects on European Sites as it requires the development of a strategic plan and initiatives and will not itself lead to development or other change. There are therefore no conceivable effects on European Sites.</p>	<p>Action 4.1 does not itself result in effects on any European site, but outcomes of the action may result in new plans which could conceivably result in adverse effects.</p>	<p>Lower tier plans and/or interventions will be required to comply with the Habitats Regulations and undergo AA where necessary.</p>
	Action 4.2: Work with our supply chain to embed sustainability in the delivery of water and wastewater infrastructure.	<p>UÉ is committed to collaborating with their supply chain to help meet their Net Zero targets. They will encourage innovation within the supply chain and continue to build collaborative partnerships and are committed to clear and transparent communication with their suppliers. UÉ will work with our suppliers to support them through guidance on sustainable practices.</p> <p>None of the elements of the action will themselves lead to development or other change and there are no conceivable effects on European Sites, as no links or pathways can be identified.</p>	<p>Action 4.2 will have no conceivable effects on any European site.</p>	<p>None required.</p>
11: Adopting circular approaches: We manage our assets to maximise resource recovery and resource efficiency and minimise waste.	Action 4.3: Review and implement the National Wastewater Sludge Management Plan.	<p>UÉ will review and implement the NWSMP. UÉ will explore new and innovative ways to use the materials recovered from treatment processes (bioresources) and consider advanced technologies and processes to extract more value from sludge.</p> <p>The NWSMP underwent AA and the NIS was published in 2016. Mitigation measures were proposed for actions of the NWSMP including a requirement to undertake AA where appropriate, to ensure that <i>"any project and any associated works, individually or in combination with other plans or projects, are subject to Appropriate Assessment Screening to ensure there are no likely significant effects on the integrity (defined by the structure and function) of any Natura 2000 site(s) and that the requirements of Article 6(3) and 6(4) of the EU Habitats Directive are fully satisfied."</i> Since the NWSMP is a lower tier plan to the WSSSP 2050 it is therefore concluded that whilst outcomes of action 4.3 could have effects on European Sites these have already been fully assessed and addressed within the NWSMP NIS/AA.</p>	<p>Action 4.3 will not have any <i>further</i> effects on European Sites, although without mitigation the existing NWSMP has been identified as having the potential to result in adverse effects.</p>	<p>Existing mitigation measures within the NWSMP NIS, including additional AA where required, should be complied with.</p> <p>No additional mitigation required.</p>
	Action 4.4: Maximise circular economy benefits.	<p>UÉ's ambition is to embed a circular economy philosophy. This includes the development and implementation of a new Circular Economy Design Standard which will cover the entire life cycle of managing water and wastewater assets.</p> <p>None of the elements of the action will themselves lead to development or other change and there are no conceivable effects on European Sites, as no links or pathways can be identified.</p>	<p>Action 4.4 will have no conceivable effects on any European site.</p>	<p>None required.</p>
12: Managing our assets: We will manage the risk and resilience of our services through best practice asset management.	Action 4.5: Manage activities on our assets in a coordinated manner across their full lifecycle.	<p>UÉ will apply an ISO55000 Asset Management approach to all activities on their assets. This includes the development of the culture, organisational structure, policies, strategies, plans, processes the information systems required to manage assets effectively. The action includes the collection of data on all assets.</p> <p>None of the elements of the action will themselves lead to development or other change and there are no conceivable effects on European Sites, as no links or pathways can be identified.</p>	<p>Action 4.5 will have no conceivable effects on any European site.</p>	<p>None required.</p>
	Action 4.6: Ensure risk and value-based decision making across the lifecycle of assets.	<p>UÉ use risk and value-based whole life-cycle decision-making systems for their investment planning processes.</p> <p>None of the elements of the action will themselves lead to development or other change and there are no conceivable effects on European Sites, as no links or pathways can be identified.</p>	<p>Action 4.6 will have no conceivable effects on any European site.</p>	<p>None required.</p>

Strategic Aims (Priorities)	Action	AA Commentary	AA Conclusion	Mitigation
13: Gaining value from innovation: We will drive research and innovation to deliver value and meet future challenges.	Action 4.7: Develop a culture of innovation in the water services sector to enable a sustainable future.	<p>The Action aims to ensure that UÉ remain committed to driving research and innovation activities to enable a sustainable future including the challenges of climate change and biodiversity loss.</p> <p>None of the elements of the action will themselves lead to development or other change and there are no conceivable effects on European Sites, as no links or pathways can be identified.</p>	Action 4.7 will have no conceivable effects on any European site.	None required.
	Action 4.8: Continue to develop foresight and horizon scanning capability.	<p>UÉ will undertake a horizon scanning exercise to facilitate forward planning. It will build on their Vision 2050 work, improving their long-term vision.</p> <p>None of the elements of the action will themselves lead to development or other change and there are no conceivable effects on European Sites, as no links or pathways can be identified.</p>	Action 4.8 will have no conceivable effects on any European site.	None required.
14: Securing long-term funding: We will work with our stakeholders to secure long-term funding for efficient and resilient services.	Action 4.9: Quantify and articulate long-term investment needs for our water and wastewater assets.	<p>UÉ need to continue to undertake sustained capital investment. UÉ will also need to manage this investment and continue the long-term investment planning. This will include working with funding stakeholders over multiple investment periods.</p> <p>The action is primarily administrative. None of the elements of the action will themselves lead to development and there are no conceivable effects on European Sites, as no links or pathways can be identified. However, outcomes of the action may lead to impacts on other actions of the WSSP 2050, such as development or other change which would take place at a lower tier. These developments/changes would be required to undergo AA Screening/AA where appropriate, but they are not a direct outcome of Action 4.9; they would be captured by the AA on other actions where developments or other changes as outcomes are likely.</p>	Action 4.9 will have no conceivable effects on any European site.	None required.
	Action 4.10: Secure multi-annual funding approach.	<p>As regulated utility, UÉ's funding model presents challenges in the context of their capital investment program. Therefore, UÉ will be working to investigate more certainty on funding availability on a multi-annual basis and ensuring it works in sync with the regulatory model.</p> <p>None of the elements of the action will themselves lead to development or other change and there are no conceivable effects on European Sites, as no links or pathways can be identified.</p>	Action 4.10 will have no conceivable effects on any European site.	None required.




7 In Combination Assessment

Under Article 6(3) of the Habitats Directive, an assessment of 'in-combination' effects with other plans and projects is required. The assessment used the best available information at the time of writing.

Table 7-1 provides the list of national plans and programmes examined in the assessment. The items are listed by spatial hierarchy with the exception of the single UK-wide plan which is listed last. As stated in Section 6.2.2, only 'similar' high-level/strategic plans were included in the assessment i.e. plans at the same level in the planning hierarchy. In addition, NED requested that two sets of Acts/Regulations be included within the assessment.

Given the strategic nature of the directives, plans and programmes it is recognised that the identification of tangible in-combination effects is limited. A much more in depth and comprehensive examination of in-combination effects will be required for plans and projects at a lower tier to the Draft WSSP 2050.

The in-combination assessment of plans and programmes was colour coded to indicate where effects may occur, and mitigation measures be required as below.

	Actions concluded to have no conceivable effects on European Sites.
	In-combination effects are conceivable but not identifiable.
	In-combination effects are on a specific European Site conceivable.

For four of the items considered, in-combination effects were conceivable, but it could not be determined how, when or where such effects may occur.

For a fifth item – the NI Draft Flood Risk Management Plan 2021-2027 – potential adverse effects on the River Foyle and Tributaries SAC (Northern Ireland) and therefore on the River Finn SAC (Ireland) were identified (the River Finn is a tributary of the River Foyle). A possible in-combination effect with the Draft WSSP 2050 was therefore identified at these sites. However, none of the actions of the Draft WSSP 2050 identify any specific locations where interventions may take place and therefore no precise in-combination effects can be identified. As a result, the mitigation identified in Tables 6-4 to 6-7 would be sufficient to avoid any adverse in-combination effects.

Table 7-1: Acts, Plans and Programmes Examined in the In-Combination Assessment

Act/Plan and Author/Owner	Act/Plan Purpose	Potential In-combination interactions/Effects	Conclusion
National Plans			
<p>Project Ireland 2040</p> <p>National Planning Framework, Project Ireland 2040</p> <p>DHPLG (2018)</p> <p>National Development Plan 2021-2030</p> <p>Department of Public Expenditure and Reform (2021)</p> <p>https://www.gov.ie/en/campaigns/09022006-project-ireland-2040/</p> <p>https://www.npf.ie/</p> <p>https://www.gov.ie/en/publication/774e2-national-development-plan-2021-2030/</p>	<p>Project Ireland 2040 is the government's long-term overarching strategy to make Ireland a better country for all and to build a more resilient and sustainable future. The strategy ensures the alignment of investment plans with the stated National Strategic Objectives for 2040 in a considered, cohesive and defined manner.</p> <p>The National Planning Framework (NPF) and the National Development Plan (NDP) 2021-2030 combine to form Project Ireland 2040. The NPF sets the vision and strategy for the development of our country to 2040 and the NDP provides the enabling investment to implement that strategy.</p> <p>The NPF is the Government's high-level strategic plan for shaping the future growth and development of Ireland out to the year 2040. It is a framework to guide public and private investment, to create and promote opportunities for our people, and to protect and enhance the environment. Investment is outlined in the companion document, the NDP, and details key projects that will make plans within the NPF a reality.</p>	<p>The NPF and NDP together create a unified and coherent plan, the NPF setting the overarching spatial strategy for the next 20 years and the NDP setting out the 10-year investment strategy. The NDP, as a budget and financial plan, is not part of the physical planning process. Projects funded under the NDP will be subject to planning law and may require SEA and AA as appropriate. However, these requirements do not arise in relation to the NDP itself.</p> <p>A draft (pre-consultation) NIS was prepared having concluded that the NPF should be subject to AA. The pre-consultation NIS concluded that, subject to the mitigation proposed being incorporated into the NPF, there would be no adverse effects on the integrity of any European Sites.</p> <p>Following statutory consultation, modifications and amendments were made to the draft NPF and these were assessed in a new version of the NIS. This concluded that the NPF would not have any adverse effects on site integrity.</p> <p>The NPF is a strategic and high-level policy framework, to inform the preparation of subsidiary strategies (lower tier plans), such as Regional Spatial and Economic Strategies and other statutory land-use plans such as city and county development plans and local area plans. The NPF does not determine the precise location of any development project or designate or allocate specific land uses, nor does it preclude the consideration of alternatives. Lower tier plans and their detailed objectives and policies will themselves be subject to appropriate assessment and will therefore be fully considered at that time.</p> <p>All subsidiary actions and policy preparation informed by the NPF shall be required to conform to the relevant regulatory provisions aimed at preventing pollution or other environmental effects likely to adversely affect the integrity of European Sites. For this reason, in considering whether the NPF will adversely affect the integrity of any European site, it has been recognised that the NPF does not, in and of itself, give direct effect to any specific projects nor does it authorise specific individual projects which might adversely affect the integrity of any European Site.</p> <p>A precautionary approach was applied in preparation of the NPF in order to ensure that lower tier plans and strategies do not themselves give rise to effects on the integrity of European Sites, by explicitly including a number of safeguards. The first of these safeguards (National Policy Objective (NPO) 59) states:</p> <p>Enhance the conservation status and improve the management of protected areas and protected species by:</p> <ul style="list-style-type: none"> • Implementing relevant EU Directives to protect Ireland's environment and wildlife; • Integrating policies and objectives for the protection and restoration of biodiversity in statutory development plans; • Developing and utilising licensing and consent systems to facilitate sustainable activities within Natura 2000 sites; • Continued research, survey programmes and monitoring of habitats and species. <p>The second (NPO 75) states:</p> <p>Ensure that all plans, projects and activities requiring consent arising from the NPF are subject to the relevant environmental assessment requirements including SEA, EIA and AA as appropriate.</p>	<p>No in-combination effect.</p> <p>The NPF is a high-level plan and does not determine the precise location of any development project or designate or allocate specific land uses, nor does it preclude the consideration of alternatives.</p> <p>In addition, the NPF contains safeguards to ensure that all lower tier plans are subject to the relevant provisions of national law including a requirement that all plans, projects and activities requiring consent arising from the NPF are subject to AA as appropriate.</p>

Act/Plan and Author/Owner	Act/Plan Purpose	Potential In-combination interactions/Effects	Conclusion
<p>Ireland's 4th National Biodiversity Action Plan 2023–2030</p> <p>NPWS (2024)</p> <p>https://www.npws.ie/legislation/national-biodiversity-action-plan</p>	<p>The plan sets the national biodiversity agenda for the period 2023-2030 and aims to deliver the transformative changes required to the ways in which Ireland values and protects nature.</p> <p>The plan includes objectives and actions seeking to ensure the protection of the Natura 2000 network.</p> <p>Furthermore, the Wildlife (Amendment) Act 2023 introduced a new public sector duty on biodiversity. The legislation provides that every public body, as listed in the Act, is obliged to have regard to the objectives and targets in the National Biodiversity Action Plan.</p>	<p>The NBAP states that: <i>"The NBAP works on the principle that existing regulations associated with EU Directives relating to the protection of biodiversity will be implemented. This includes Article 6 of the Habitats Directive (92/43/EEC) which obliges member states to undertake an 'appropriate assessment' (AA) for any plan or project which may have a likely significant effect on any European Site."</i></p> <p>In addition, the plan states that in support of <i>Outcome 2D: Biodiversity and ecosystem services in the marine and freshwater environment are conserved and restored</i> the plan states that <i>"Uisce Éireann will implement its Water Services Strategic Plan (2015-2040), in particular its objective to protect and enhance the environment, together with its Biodiversity Action Plan"</i>.</p>	<p>No in-combination effect.</p> <p>The NBAP aims include objectives and actions seeking to ensure the protection of the Natura 2000 network. Furthermore, it works on the principle that AA will be undertaken on plans/projects where required. This also includes implementation of the WSSP (2015-2040).</p>
<p>National Strategic Plan for Sustainable Aquaculture Development 2030</p> <p>DAFM (2023)</p> <p>https://www.gov.ie/en/publication/ece67-national-strategic-plan-for-sustainable-aquaculture-development-2030/</p>	<p>The National Strategic Plan for Sustainable Aquaculture Development 2030 (NSPSA) is the successor plan to that developed in 2015 for the period up to 2020. The plan seeks to set the path for the Irish Aquaculture sector so that it is resilient, competitive and a global standard in sustainability and quality.</p>	<p>A draft NIS has been produced which acknowledges the high-level nature of the NSPSA and therefore recommends overarching mitigation measures to be included with the plan. These measures include commitments to implement other overarching policies aimed at protecting the environment and a recommendation that the draft plan shall include the following actions:</p> <ul style="list-style-type: none"> Consent for proposals must demonstrate that they can be implemented without adverse effects on the integrity of Special Areas of Conservation (SACs) or Special Protection Areas (SPAs). Where adverse effects from proposals remain following mitigation, in line with Habitats Directive Article 6(3), consent for the proposals cannot be granted unless the prerequisites set by Article 6(4) are met. All investigative and feasibility studies to be carried out to support decision making in relation to this strategic plan should also include an environmental appraisal which considers the potential effects on the wider environment, including specifically the Natura 2000 Network. <p>The post-consultation NIS noted that all European Sites within the Island of Ireland should be included; sites for marine mammals within 100km of Ireland; SACs which discharge into the western and north-western coastal regions of the UK where anadromous fish or freshwater pearl mussel are identified as qualifying interests; sites within 100km of Ireland for pelagic seabird and wildfowl/wader sites.</p> <p>Mitigation strategies and measures were proposed in the document, including project level AA where required, to avoid adverse effects on site integrity.</p>	<p>No in-combination effect.</p> <p>The strategic plan was subject to AA and potential effects were identified. Overarching mitigation measures were identified to be included with the plan. Given the high-level nature of the plan, and the implementation of the overarching mitigation measures, no in-combination effects are predicted.</p>
<p>Ag Climatise, A Roadmap towards Climate Neutrality</p> <p>DAFM (2020)</p> <p>https://www.gov.ie/en/publication/07fbe-ag-climatise-a-roadmap-towards-climate-neutrality/</p>	<p>Developed by the Department of Agriculture, Food and the Marine (DAFM) a roadmap designed to help all stakeholders to work together to tackle climate change and air pollution.</p>	<p>An AA was not undertaken as an assessment concluded it was not required as the purpose of the roadmap is to inform DAFM policy of the actions necessary to protect the environment and address climate change, and not to set out projects or propose specific measures.</p> <p>Furthermore, it was concluded that the roadmap will inform other future plans as its main output and these individual policies, strategies, plans and measures for, or related to, agriculture and forest must be considered under the AA process. where appropriate.</p> <p>While the primary focus of this roadmap is on GHG and ammonia emissions, it is clear that achieving our targets for climate and air will also have positive co-benefits for water quality and biodiversity.</p> <p>One of six main tasks to meet climate and environmental objectives, <i>Reduce nutrient loss to the environment and contribute to improved water quality and biodiversity</i>.</p>	<p>No in-combination effect.</p> <p>An AA was not required. However, given the aims of and objectives of the Roadmap, there is the potential for beneficial effects on the Natura 2000 network.</p>

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<p>Catchment Flood Risk Assessment and Management (CFRAM) Programme</p> <p>Funded and managed by the Office of Public Works</p>	<p>Ireland's CFRAM Programme is central to the medium and long-term strategy for the reduction and management of flood risk throughout Ireland. It delivers core components of the National Flood Policy whilst also meeting the requirements of the EU Floods Directive.</p> <p>The programme includes data collection, risk mapping, option testing and the development of Flood Risk Management Plans, the plans being subject to assessment under the Habitats Regulations.</p>	<p>The programme is an umbrella programme through which plans and projects can be delivered and is not a plan in of itself. Whilst it is conceivable that effects may occur as a result of various plans (such as River Basin Management Plans and Flood Risk Management Plans), the programme in of itself will not have any effects. There is therefore no potential for in-combination effects.</p>	<p>No in-combination effect.</p> <p>CFRAM is an umbrella programme of other projects and plans and therefore, in of itself, will not have any effects on the Natura 2000 network.</p>
<p>Climate Action Plan</p> <p>Department of the Environment, Climate and Communications (2023, 2024)</p> <p>https://www.gov.ie/en/publication/7bd8c-climate-action-plan-2023/</p> <p>https://www.gov.ie/en/publication/79659-climate-action-plan-2024/</p>	<p>The Climate Action Plan 2023 (CAP23) is the second annual update to Ireland's Climate Action Plan 2019 and was launched on 21 December 2022.</p> <p>The plan implements the carbon budgets and sectoral emissions ceilings and sets out a roadmap for taking decisive action to halve our emissions by 2030 and reach net zero no later than 2050, as committed to in the Programme for Government.</p> <p>The Climate Action Plan 2024 (CAP24) is the third annual update to Ireland's Climate Action Plan. It is currently open for public consultation and has been subject to SEA and AA.</p>	<p>The plan is a roadmap for taking decisive action for meeting Ireland's emissions reduction requirements and identified 180 actions. It is an update of the 2019 plan. The actions mainly look to develop and review policies and strategies, setting out how Ireland can accelerate the actions that are required. The plan also includes the continuation of the NWPS restoration programme of Natura 2000 (bog) sites.</p> <p>The plan lays out actions and objectives which themselves may lead to the developments of plans by other government departments.</p> <p>The third annual update was published in February 2024 for public consultation together with SEA/AA. An NIS has been undertaken for the plan. The NIS identified all sites with Ireland and Northern Ireland taking into account transboundary considerations. However, the NIS stated that it was not practical for the report to identify transboundary sites in any detail; AA on lower tier plans and sectoral plans would be in a position to consider transboundary issues in more detail where geographic context can be added.</p> <p>The AA identified CAP23/24 actions contained within the draft Plan which could have the potential for adverse effects and identified where mitigation was required. General overarching mitigation was the main measure identified and ongoing/in preparation plans, programmes and projects must be consistently screened for the AA processes as appropriate. Any mitigation measures identified must also be adhered to as well as existing guidance on avoiding negative environmental effects. Specific recommendations were made for some actions.</p>	<p>No in-combination effect.</p> <p>The Climate Action Plan provides a roadmap and is therefore a high-level plan. Overarching mitigation measures were identified to be included with the plan. Given the high-level nature of the plan, and the implementation of the overarching mitigation measures, as well as specific recommendations, no in-combination effects are predicted.</p>
<p>Forest Strategy Implementation Plan including the Forestry Programme 2023-2027</p> <p>Department of Agriculture, Food and the Marine (DAFM) (2023)</p> <p>https://www.gov.ie/en/publication/1f6c6-forest-strategy-implementation-plan-including-the-forestry-programme-2023-2027/</p>	<p>A shared national vision for the role of forests, and trees in Ireland's future has been developed. In realising the vision, a new Forest Strategy for Ireland to 2030 has been developed which will underpin a new Forestry Programme for the period of 2023-2027.</p> <p>The Forest Strategy Implementation Plan sets out how Ireland's ambitions to expand its forests and to increase its role in helping address the climate and biodiversity objectives at both National and EU level can be realised. The plan contains a detailed Forest Action Plan, which includes the actions for each of the Enablers and Strategic Goals of the Forest Strategy. The plan will function as an enabler of the strategy for the 2023-2030 period.</p>	<p>The implementation plan for the Forestry Strategy underwent SEA and AA. The AA noted that all existing mandatory requirements of DAFM would be complied with. For many actions of the implementation plan, it was proposed that there should be a requirement that any future support scheme should be subject to AA Screening. For other actions, AA Screening and, where appropriate, Stage 2 NIS was also proposed. In addition, alignment to other national, regional and local plans (such as Biodiversity Action Plan) was recommended.</p> <p>Actions of the implementation plan also included the restoration and conservation of state-owned Natura 2000 sites as appropriate.</p>	<p>No in-combination effect.</p> <p>The implementation plan was subject to AA and potential effects were identified. Overarching mitigation measures were identified to be included with the plan. Given the nature of the plan, and the implementation of the overarching mitigation measures, no in-combination effects are predicted.</p>

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<p>National Adaptation Framework, Planning for a Climate Resilient Ireland</p> <p>DECC (2018)</p> <p>https://www.gov.ie/en/publication/fbe331-national-adaptation-framework/</p>	<p>In accordance with the 2015 Act, the National Adaptation Framework (NAF) specifies the national strategy for the application of adaptation measures in different sectors and by local authorities in their administrative areas in order to reduce the vulnerability of the State to the negative effects of climate change and to avail of any positive effects that may occur.</p>	<p>The NAF was pre-screened for a requirement for AA and it was concluded that an AA was not required. As an assessment under the Habitats Regulations was not required there can be possibility of in-combination effects as the NAF would not lead to any effects on European Sites.</p>	<p>No in-combination effect.</p> <p>An AA was not required.</p>
<p>National Marine Planning Framework</p> <p>Department of Housing, Local Government and Heritage (2021)</p> <p>https://www.gov.ie/en/publication/60e57-national-marine-planning-framework/</p>	<p>The National Marine Planning Framework (NMPF) brings together all marine-based human activities, outlining the government's vision, objectives and marine planning policies for each marine activity.</p> <p>The NMPF details how these marine activities will interact with each other in an ocean space that is under increasing spatial pressure, ensuring the sustainable use of our marine resources to 2040.</p>	<p>The NMPF NIS study area considered all sites within the NMPF area as well as a 50km marine buffer and a 5km inland buffer. The 50km marine buffer also took into consideration transboundary Natura 2000 sites within other jurisdictions. Additional consideration was taken for specific species/species groups including otters, anadromous fish and pelagic seabirds. In considering the potential for adverse effects, the NIS noted that the NMPF is a strategic and high-level policy framework, to inform the preparation of subsequent strategies. Furthermore, it was noted that the lower tier strategies and plans would themselves be subject to appropriate assessment as necessary.</p> <p>The NIS determined that the plan would have no adverse effects on site integrity with mitigation in place. This mitigation included requirements to do AA Screening/AA where appropriate, as well as good practice approaches to environmental protection. These policies/approaches addressed the need to better integrate biodiversity protection and management of protected habitats and species into marine planning. They also set the scene for a cascading hierarchy of protection by explicitly ensuring that all plans, projects and activities informed by the NMPF must take account of the wider biodiversity agenda.</p>	<p>No in-combination effect.</p> <p>The framework was subject to AA and potential effects were identified. Overarching mitigation measures/policies were identified to be included with the framework. Given the nature of the framework, and the implementation of the overarching mitigation measures, no in-combination effects are predicted.</p>
<p>National Peatlands Strategy 2015</p> <p>NPWS (2015)</p> <p>https://www.npws.ie/peatlands-and-turf-cutting/peatlands-council/national-peatlands-strategy</p>	<p>The plan is a national strategy on Peatlands conservation and management, in consultation with bog owners and other stakeholders, to deal with long-term issues such as land management, restoration, conservation, tourism potential, carbon accounting and community participation in managing this resource.</p>	<p>The National Peatland Strategy sets out a cross-governmental approach to managing issues that relate to peatlands including compliance with relevant national and international environmental legislation, agreements, plans and policies; climate change; forestry; water quality; flood control; energy; nature conservation and restoration; land use planning; and agriculture.</p> <p>The strategy set out areas where Appropriate Assessment was likely to be required with respect to the protection of peatlands.</p>	<p>No in-combination effect.</p> <p>Given the high-level nature of the strategy and the way it sets out a cross-governmental approach to managing peatland issues, no in-combination effects are predicted.</p>
<p>River Basin Management Plan for Ireland 2022 – 2027 (Water Action Plan 2024)</p> <p>DHLGH (published 3 September 2024)</p> <p>https://www.gov.ie/en/campaigns/0f55e-river-basin-management-plan/</p> <p>https://www.gov.ie/en/policy-information/8da54-river-basin-management-plan-2022-2027/</p>	<p>The RBMP sets out the measures that are necessary to protect and restore water quality in Ireland. The overall aim of the plan is to ensure that our natural waters are sustainably managed and that freshwater resources are protected so as to maintain and improve Ireland's water environment. The RBMP includes Sectoral Action Work Plans and 46 Catchment Management Plans (sub plans of the RBMP, yet to be developed).</p> <p>The RBMP was published in September 2024.</p>	<p>The NIS noted that the <i>draft</i> RBMP is a strategic plan which sets the framework for and relies to a significant degree on programme and project initiatives to deliver measures on the ground. Furthermore, it was noted that many of these measures have already undergone AA or will undergo AA with the development of specific measures. Those measures committed to in these other plans would be essential to ensuring that the objectives of the RBMP are met and that the RBMP does not have adverse effects on the integrity any European Site. In addition, overarching mitigation measures were also proposed. The RBMP includes a commitment to the Blue Dot Programme,</p> <p>The NIS for the <i>draft</i> RBMP also identified that within the WSSP 2015 there was a requirement for additional plan/project environmental assessments would be carried out at the tier 2 and tier 3 level to avoid adverse effects, and that there would be no in-combination effects. The NIS also stated that Uisce Éireann would review their WSSP and that the review and update would be subject to AA as the WSSP 2015 identified potential for LSEs. It was recommended that Uisce Éireann review the mitigation measures within the WSSP 2015 NIS "to establish their implementation and effectiveness in order to inform the next plan which will be required to engage with the AA process" and, furthermore, that the WSSP take cognisance of the 46 Catchment Management Plans as soon as they are available.</p>	<p>No in-combination effect.</p> <p>The <i>draft</i> RBMP was subject to AA and potential effects were identified. Overarching mitigation measures were identified to be included with the plan. These were amended as necessary after consultation for the finalised RBMP and associated NIS, as well as noting that measures were already committed to. Given the nature of the plan, and the implementation of the various mitigation measures, no in-combination effects are predicted.</p>

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		Consultation on the draft RBMP, including NIS, closed in March 2022. Following stakeholder feedback and updates to the plan, all changes were screened for likely significant effects. The mitigation chapter was updated to reflect changes to the plan. However, the conclusion of the NIS remained the same, that, subject to the inclusion of mitigation measures presented in the NIS, the RBMP would not adversely affect the integrity of a European site (whether individually or in combination with other plans or projects).	
NI Plans			
<p>Towards an Integrated Coastal Zone Management Strategy for Northern Ireland 2006 – 2026</p> <p>Department of the Environment (DOENI) 2006</p> <p>https://www.daera-ni.gov.uk/publications/towards-integrated-coastal-zone-management-strategy-northern-ireland-2006-2026</p>	<p>The Integrated Coastal Zone Management (ICZM) aims to establish sustainable levels of economic and social activity in coastal areas while protecting the coastal environment. ICZM seeks to reconcile the different policies that have an effect on the coast and to establish a framework that facilitates the integration of the interests and responsibilities of those involved in the development, management and use of the coast.</p>	<p>The Strategy forms the basis for a new approach to the management of the coastal area and will provide a useful framework for all users, planners, managers and developers. The strategy is not an economic development plan or a social regeneration plan, and is also not a nature conservation plan. It is designed to promote integrated management by encouraging bodies to work together and to consider management of the coastal zone as a whole, and to discuss and resolve issues at local level. Additionally, the Strategy does not impose any new duties on Government Departments, public bodies, organisations or individuals.</p> <p>The Strategy is a high-level document aimed at promoting integration of management decisions/issues, does not promote any developments itself or direct activities to a particular location.</p>	<p>No in-combination effect.</p> <p>The Management Strategy is a high-level strategy and does not promote any developments or activities in of itself.</p>
<p>Sustainable Water – A Long term water strategy for Northern Ireland (2015 –2040)</p> <p>Department for Regional Development (2016)</p> <p>https://www.infrastructure-ni.gov.uk/articles/long-term-water-strategy-northern-ireland</p>	<p>The Strategy presents a framework for action which will facilitate implementation of a range of initiatives aimed at delivering the long-term vision to have a sustainable water sector in Northern Ireland.</p> <p>The Strategy encourages a sustainable and integrated approach to managing all different water needs in a way which promotes regional development, without compromising the environment or increasing flood risk.</p>	<p>The strategy is a high-level plan that identified 18 aims and 68 individual policies (including ones aiming at protecting biodiversity). The measures were proposed to be set out in a Strategy Implementation Plan.</p> <p>No assessment under the Habitats Regulations has been identified. However, some aims within the strategy indicate a requirement to ensure compliance with the Habitats, Birds and Water Framework Directives. Given the absence of a HRA it is concluded that no effects on European Sites/UK Site Network were identified.</p>	<p>No in-combination effect.</p>
<p>Draft Marine Plan for Northern Ireland (2018)</p> <p>DAERA (April 2018)</p> <p>https://www.daera-ni.gov.uk/articles/marine-plan-northern-ireland</p>	<p>The Marine Plan for Northern Ireland will inform and guide the regulation, management, use and protection of the marine area. It is a single document made up of two plans, one for the inshore region and one for the offshore region.</p> <p>The Marine Plan has been developed within the framework of the UK Marine Policy Statement and comes out of requirements under the Marine and Coastal Access Act 2009 and the Marine Act (Northern Ireland) 2013.</p>	<p>The Marine Plan has a vision for a <i>“healthy marine area which is managed sustainably for the economic, environmental and social prosperity of present and future generations”</i>. Objectives of the plan include promotion of healthy marine ecosystems, as well as realising the potential of energy resources, sustainable development, coastal communities and recreational value.</p> <p>HRA pre-screening identified a total of 345 European/Ramsar sites within 100km of the plan area for consideration at the screening stage. This included coastal/marine SACs and SPAs within Ireland. The screening report concluded that none of the draft Marine Plan policies in the Marine Plan for Northern Ireland met the criteria for screening. This was because the policies were either general in nature, did not direct activities to a particular location, or had previously been subject to an HRA and/or they were consistent with the conservation objectives of European sites. There was therefore no need to proceed to subsequent HRA stages (i.e. AA).</p>	<p>No in-combination effect.</p> <p>HRA screening concluded that none of the Marine Plan policies would result in an LSE on European/Ramsar sites and features.</p>
<p>Northern Ireland Water – Our Draft Strategy 2021-2046</p> <p>Northern Ireland (NI) Water (2020)</p> <p>https://www.niwater.com/ourstrategy/</p>	<p>The strategy designed to make Northern Ireland a more healthy, sustainable and prosperous place in which to live. The strategy comprises centres around five strategic priorities: Customer, Water, Economy, Nature and People. NI Water intend that their services always contribute to a flourishing natural environment.</p>	<p>No assessment against the Habitats Regulations has been undertaken. However, conceivably there is the potential for effects given that improvements to the water and sewerage infrastructure are possible outcomes of the Strategy. Conversely, enhancements to the natural environment are likely to occur as a result, for example, the disconnection of surface areas from existing combined sewers. Given that an ambition of NI Water is that their services always contribute to a flourishing natural environment. In the absence of an assessment against the Habitats Regulations, it is not possible to confirm potential in-combination effects at this time.</p>	<p>No in-combination effect.</p> <p>Whilst effects (both negative and positive) are conceivable, in the absence of an assessment under the Habitats Regulations it is not possible to accurately determine what these effects might be.</p>

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<p>Water Resource and Supply Resilience Plan (WR&SRP)</p> <p>NI Water (2020)</p> <p>https://www.niwater.com/managing-northern-irelands-water-resources/</p>	<p>The WR&SR Plan sets out how NI Water intends to maintain the balance between supply and demand for water for all its customers over the long-term and the operational and management options and activities available to respond to short-term critical events such as drought and freeze-thaw. A key strategic aim of this plan is to improve the resilience of Northern Ireland's water supply system. WR&SRP includes a Drought Plan.</p> <p>The WR&SRP takes 2014/15 as its base year and has a planning horizon up to 2042/43 for the Water Resource Management element</p>	<p>A Stage 1 Habitats Regulations Assessment (HRA) screening assessment of the WR&SRP to identify potential for likely significant effects screened out all options in the preferred Plan as requiring Stage 2 AA with the exception of the Castor Bay WTW expansion within the Lough Neagh Ramsar site. As part of the WR&SRP a high-level AA would be required. Where AA identified the potential for likely significant effects on the Ramsar site or SPA there would need to be a commitment to replace this option to avoid Stage 3 and 4 HRA being required.</p> <p>Many of the WR&SRP options would require project level HRA to be undertaken to take account of detailed design and final route or site location. The Drought Plan included short-term actions with potential significant effects on the UK Site Network. These would be likely to require Stage 2 AA.</p> <p>Eight SAC, SPA and Ramsar sites were screened in for the Stage 2 AA of which two – River Foyle and Tributaries SAC, Lough Foyle SPA – had direct connectivity with sites in Ireland. The HRA concluded that with standard good practice construction methods, and sensitive siting of the works the potential for likely significant effects would be avoided/eliminated.</p> <p>It is conceivable that in-combination effects could occur as a result of options where project level HRA would be undertaken. This includes the Drought Plan where four broad types of measures were identified including increased abstractions which could lead to reduced flow/water levels. However, the locations for where increased abstractions (outwith existing licence conditions) have not been identified.</p>	<p>No in-combination effect.</p> <p>Potential effects on sites identified that have connectivity with sites in Ireland can be avoided/eliminated with standard good practice construction methods and other standard approaches.</p> <p>Other potential effects cannot be determined in any detail as the location of options have not been identified.</p>
<p>Draft Environment Strategy for Northern Ireland DAERA (2021)</p> <p>https://www.daera-ni.gov.uk/consultations/environment-strategy-consultation</p>	<p>The Environment Strategy is intended to be an overarching document setting out Northern Ireland's environmental priorities for the coming decades and will form part of the Green Growth agenda.</p> <p>The Environment Strategy will form the basis for a coherent and effective set of interventions that can deliver real improvements in the quality of the environment and thereby improve the health and well-being of all who live and work in Northern Ireland; elevate Northern Ireland to an environmental leader; create opportunities to develop the economy; and enable Northern Ireland to play its part in protecting the global environment for decades to come.</p>	<p>No assessment against the Habitats Regulations has been undertaken; the Environment Strategy is a high-level strategy setting the Northern Ireland Executive's direction of travel for the environment, greater detail on actions, targets and desired future outcomes will be provided during the development and implementation of the various Strategies, Action Plans and Programmes which will sit under the umbrella of the Environment Strategy. The detail around the various Impact Assessments to be completed will therefore be contained within those resultant Strategies, Action Plans and Programmes as it was deemed not be practicable to have them accompany the Strategy.</p>	<p>No in-combination effect.</p> <p>The Environment Strategy is a high-level strategy and all impact assessments (including against the Habitats Regulations) will be undertaken at a lower tier of plans.</p>
<p>NI Draft Flood Risk Management Plan 2021-2027</p> <p>Department for Infrastructure (2021)</p> <p>https://www.infrastructure-ni.gov.uk/publications/second-cycle-northern-ireland-flood-risk-management-plan-2021-2027</p>	<p>A Flood Risk Management Plan (FRMP) is a requirement of the Floods Directive Regulations. It highlights the flood hazards and risks in the Areas of Potential Significant Flood Risk in NI from rivers, the sea and surface water. The plan identifies the Objectives and Measures that will be undertaken to manage the risk of flooding and sets out how the relevant authorities will work together with communities to manage flood risks.</p> <p>The FRMP takes into account the policy objectives set out in the NI Executive's long-term vision for the sustainable development of</p>	<p>A HRA including Appropriate Assessment of the plan has been undertaken. The HRA set out a zone of influence of measures within the plan which included European Sites within Ireland (five SACs, three SPAs): Carlingford Shore SAC, Carlingford Mountains SAC, Dundalk Bay SAC, River Finn SAC, Lough Swilly SAC, Lough Foyle SPA, Lough Swilly SPA, Carlingford Lough SPA. Potential adverse effects resulting from habitat loss, water quality and habitat deterioration, and disturbance and displacement were identified. Specific issues were identified as a result of two Areas of Potential Significant Flood Risk; habitat loss, and disturbance and displacement LSEs on the River Finn SAC; water quality and habitat deterioration LSEs on Lough Foyle SPA, Lough Swilly SPA and SAC, Carlingford Shore SAC and Carlingford Lough SPA. No LSEs were identified on the Carlingford Mountains SAC or the Dundalk Bay SAC. In-combination effects were assessed with plans at a similar level i.e. river basin and flood risk management plans, and land-use plans; this included Ireland Flood Risk Management Plans (CFRAMS) 2016.</p>	<p>Potential for in-combination effects.</p> <p>In-combination effects possible, especially on the River Finn SAC where standard good construction practices/best practice protocols might not be sufficient to avoid adverse effects.</p> <p>As none of the actions of the Draft WSSP 2050 identify any specific locations where interventions may take place no precise in-combination effects can be identified. Therefore,</p>

Act/Plan and Author/Owner	Act/Plan Purpose	Potential In-combination interactions/Effects	Conclusion
	the water sector: <i>Sustainable Water – A Long term water strategy for Northern Ireland (2015 – 2040)</i> .	<p>AA of individual projects would be required, but measures included within the NI FRMP included standard good construction practices including Erosion and Sedimentation Control Plans, Water Pollution Prevention and Environmental Emergency Response Plans, appropriate timing of works, screening, adherence to noise disturbance guidance, and best practice protocols and Standard Operating Procedures.</p> <p>The Derry/Londonderry Area of Potential Significant Flood Risk was identified as having a potential habitat loss effect on River Foyle and Tributaries SAC (NI), which is downstream of the River Finn SAC (Ireland) for which, taking the precautionary approach, habitat loss was also identified. As mitigation for this effect "<i>Direct habitat loss within European Sites will be avoided for new-build infrastructure and avoided where reasonably practicable for refurbishment of infrastructure within European Sites</i>" was proposed together with other, good practice, measures. Furthermore, it was accepted that AA of individual projects would be required. Whilst UÉ does not have responsibility for the management of flood-risk in Ireland, any UÉ infrastructure/management developments which might impact on the River Finn SAC could have cumulative effects on that site and also on the River Foyle and Tributaries SAC.</p>	the mitigation identified in Section 6 (further AA Screening/AA for lower tier plans/interventions as appropriate) will be sufficient to avoid any adverse effects.
<p>Draft 3rd cycle River Basin Management Plan 2021-2027</p> <p>DAERA (2021)</p> <p>https://www.daera-ni.gov.uk/consultations/consultation-draft-3rd-cycle-river-basin-management-plan-2021-2027</p>	<p>The Water Environment (Water Framework Directive) Regulations (Northern Ireland) 2017 require the production and implementation of a River Basin Management Plan (RBMP) in six yearly cycles. The RBMP takes an integrated approach, identifying those water bodies which can be classified as being at 'good or better' status. It also sets the objectives and a programme of measures for the next six-year cycle to help improve those water bodies which are classified as below 'good' status. The 3rd cycle RBMP period runs from 2021-2027. The plan is currently in Draft.</p>	<p>An SEA was conducted for the first set of plans in 2009 and a Habitats Directive Article 6 Assessment was carried out in parallel. It was identified in the 2009 HRA that there were potential effects which could accrue from other Policies, Plans and Programmes, but that these could not be assessed in combination with the 2009 Plans as the specific implementation details of the Plans and these other Policies, Plans and Programmes at the water body level, were undefined at that time. It was therefore the recommendation of the assessment that screening for potential impacts under the Habitats Directive Article 6 process be put in place once the details of the implementation of the Programme of Measures (POMs) under the 2009 Plans were known, so as to ensure no 'in combination' effects with other Plans and Programmes at the time of implementation.</p> <p>A Test of Likely Significance was carried out to determine if there are any likely significant effects of the modifications contained in the new Plan (3rd cycle RBMP) on the conservation objectives of designated UK national site network sites. European Sites within Ireland were not included in the assessment.</p> <p>The findings of the screening exercise indicated that the modifications proposed for inclusion in the Plans were unlikely to have any significant [detrimental] effects (either alone or in combination with other plans or projects) on the UK national site network, at this stage, subject to the recommendation of further screening and assessment, where required, when POM implementation details become known at a site-specific level. The purpose of the River Basin Management Plans is to improve water quality and are therefore unlikely to result in any detrimental environmental impacts that may affect this habitat. However, a potentially indirect significant effect on SPAs was identified resulting from the potential improvements in water quality resulting in a potential reduction in food availability. Such effects, if they were to occur, would be site specific and as the specific details of the POMs were not known it was not possible to carry out further assessment, and such potential effects were therefore screened out stage with the recommendation that further screening be carried out once implementation details were known.</p>	<p>In-combination effects are conceivable but not identifiable to a location.</p> <p>Further screening/assessment was recommended to be undertaken, particularly for SPAs, once implementation details were known as the implications for individual waterbodies could not be defined.</p> <p>European Sites within Ireland were not included in the assessment and, therefore, potential in-combination effects on those sites cannot be identified.</p> <p>However, the purpose of River Basin Management Plans is to improve water quality and therefore, in general, they are unlikely to result in detrimental environmental impacts on aquatic habitats.</p>
UK Plans			
<p>UK Marine Policy Statement</p> <p>HM Government (2011)</p> <p>https://www.gov.uk/government/publications/uk-marine-policy-statement</p>	<p>The Marine Policy Statement (MPS) is a framework for preparing Marine Plans and taking decisions affecting the marine environment in the UK. It was prepared and adopted for the purposes of section 44 of the Marine and Coastal Access Act 2009.</p>	<p>The MPS has been subject to, and informed by, an Appraisal of Sustainability (AoS). This incorporated the requirements of the Strategic Environmental Assessment Directive. A HRA was also carried out.</p> <p>The HRA reflected the strategic, high-level nature of the MPS and so identified high level impacts only. It concluded that it was not possible to exclude the possibility that the integrity</p>	<p>In-combination effects are conceivable but not identifiable.</p> <p>The MPS is a high-level framework and high-level impacts only could be identified. The HRA concluded that it</p>

Act/Plan and Author/Owner	Act/Plan Purpose	Potential In-combination interactions/Effects	Conclusion
	<p>The Secretary of State, Scottish Ministers, Welsh Ministers and the Department of the Environment in Northern Ireland are jointly adopting the MPS and is a key step towards achieving the vision shared by the UK Administrations of having 'clean, healthy, safe, productive and biologically diverse oceans and seas'.</p> <p>The MPS will facilitate and support the formulation of Marine Plans, ensuring that marine resources are used in a sustainable way in line with the high-level marine objectives.</p>	<p>of one or more European Sites could be adversely affected by activities identified in the MPS. For this reason, an assessment of alternative solutions and Imperative Reasons of Overriding Public Interest (IROPI) was undertaken. All Marine Plans and projects carried out in accordance with the MPS may be subject to the appropriate assessment procedure. If, following this procedure, an AA would be required and this concluded that the Marine Plan or project may affect the integrity of any European site, issues relating to IROPI, site integrity and compensation would need to be addressed in accordance with the relevant legislation and guidance.</p>	<p>was not possible to exclude the possibility that European Sites could be affected. However, all Marine Plans and projects carried out in accordance with the MPS would be subject to AA where appropriate.</p>
UK and NI Acts			
The Marine and Coastal Access Act 2009	<p>The Act makes provision in relation to marine functions and activities and about migratory and freshwater fish, as well as items specific to England and Wales only.</p> <p>The Act also establishes the Marine Management Organisation (MMO) which is charged with marine functions on behalf of UK Government.</p>	<p>The Act introduces a new system of marine management. This includes a new marine planning system, which makes provision for a statement of the Government's general policies, and the general policies of each of the devolved administrations, for the marine environment, and also for marine plans which will set out in more detail what is to happen in the different parts of the areas to which they relate. The Act includes provision changing the system for licensing the carrying on of activities in the marine environment. It also provides for the designation of conservation zones. It changes the way marine fisheries are managed at a national and a local level and modifies the way licensing, conservation and fisheries rules are enforced. It allows for designation of an Exclusive Economic Zone for the UK. The Act also amends the system for managing migratory and freshwater fish.</p>	<p>No in-combination effect.</p> <p>The primary purpose of the Act is to provide a framework for the management and protection of marine and coastal areas including the designation of conservation zones.</p>
The Marine Strategy Regulations 2010	<p>The Marine Strategy Regulations 2010 require action to be taken to achieve or maintain Good Environmental Status (GES) in the seas. The Regulations require the production of a "Marine Strategy" for all UK waters and that the approach is coordinated across all four UK Administrations. It also requires cooperation with other countries.</p>	<p>The objective of the UK Marine Strategy reflects the UK's vision of having "<i>clean, healthy, safe, productive and biologically diverse oceans and seas</i>". It helps to deliver key international obligations and commitments to protect and preserve the marine environment.</p> <p>The Marine Strategy is a high-level plan which applies an ecosystem-based approach to the management of human activities. It considers 11 qualitative descriptors, alongside a wide range of human activities and prevailing physiographic, geographic and climatic conditions.</p> <p>The UK Marine Strategy comprises three parts with the Regulations requiring updates to be made every six years.</p>	<p>No in-combination effect.</p> <p>The primary purpose of the Regulations is the development of a high-level Marine Strategy to deliver commitments to protect and preserve the marine environment.</p>
The Marine Act (Northern Ireland) 2013	<p>The Act requires DAERA to establish a network of Marine Protected Areas (MPAs) in the Northern Ireland inshore region that, together with MPAs designated by the other UK administrations, contributes to the conservation and improvement of the marine environment in the UK marine area.</p>	<p>In Northern Ireland the MPA network includes SACs, SPAs, Areas of Special Scientific Interest (ASSIs), Marine Conservation Sites (MCZs) and Ramsars. MPAs are clearly defined geographical spaces, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.</p> <p>In addition, MPAs which are SACs, SPAs and/or Ramsar sites are managed through the Habitats Regulations Assessment process.</p>	<p>No in-combination effect.</p> <p>The primary purpose of the Act is to develop the MPA network, to achieve the long-term conservation of nature as well the associated ecosystem services and cultural values.</p>

8 Concluding Statement

Mitigation measures presented in the AA (Section 6) have been proposed to ensure that the WSSP 2050 will have no adverse effects on any European Site(s) either alone or in-combination with other plans and programmes.

This conclusion does not remove the need for any other plans, strategies or projects, or permissions associated with, or arising from the WSSP 2050 to be subject to Screening for AA/AA where appropriate. Furthermore, any project(s) etc. arising from the implementation of the WSSP 2050 will be required to conform to the mitigation measures and key principles for protecting European Sites identified within this NIS.

The conclusion of the NIS for the WSSP 2050 is that the WSSP will have no adverse effects on any European Site(s), either alone or in-combination with other plans and programmes.



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Appendices

Appendix A Special Areas of Conservation in Ireland

Appendix B Special Protection Areas in Ireland

Appendix C European Sites in Northern Ireland

1 Introduction

1.1 Introduction

The Water Services Strategic Plan (WSSP) presents Uisce Éireann's objectives for the next 25 years and the means by which they will achieve them. It aligns to requirements set out in the Water Services (No. 2) Act 2013. Uisce Éireann published the first Water Services Strategic Plan in 2015 and are now undertaking the process to consult on a new Water Service Strategic Plan 2050 (WSSP 2050) which will replace the current plan. The new WSSP 2050 will be an important strategic document that will focus on the provision of safe drinking water and wastewater treatment. It is Uisce Éireann's responsibility to ensure that all their customers (households and businesses) receive a safe and secure supply of drinking water and have their wastewater collected, appropriately treated and returned safely to the environment.

Jacobs has been appointed by Uisce Éireann to prepare a Screening Report for Appropriate Assessment (AA) in relation to the WSSP 2050 in accordance with the requirements of Article 6 (3) of the European Union (EU) Habitats Directive (Directive 92/43/EEC) (the EU Habitats Directive). The Habitats Directive and the Birds Directive (2009/147/EC) are transposed in Ireland by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011) hereafter referred to as the Habitat Regulations 2011, as amended, and by Part XAB of the Planning and Development Act, 2000, as amended.

1.2 Legislative Context

The EU Habitats Directive provides legal protection for habitats and species of European importance. Articles 3 to 9 provide the legislative means to protect habitats and species of community interest through the establishment and conservation of an EU-wide network of sites known as the Natura 2000 network (hereafter referred to as European sites¹). European sites comprise Special Areas of Conservation (SACs²) and Special Protection Areas (SPAs). SPAs are designated as a result of the implementation of the Birds Directive.

This report provides information in support of a screening for AA of the WSSP 2050 in line with the requirements of Article 6(3) of the EU Habitats Directive. AA is a process for undertaking a focused impact assessment of a plan or project, examining its implications, on its own or in combination with other plans and projects, on one or more European site (s) in view of the sites' conservation objectives, as referred to in Article 6(3) of the EU Habitats Directive.

Articles 6(3) and 6(4) of the EU Habitats Directive set out the decision-making tests for plans and projects likely to affect European sites. The first step of the AA process is to carry out a Screening to establish whether, in relation to a particular plan or project, an AA is required.

Article 6(3) established the requirement for AA:

"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to Appropriate Assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."

¹ "European site" replaced the term "Natura 2000 site" under the EU (Environmental Impact Assessment and Habitats) Regulations 2011 S.I. No. 473 of 2011.

² cSACs are afforded the same protection as SACs. The process of making 'candidate' (cSAC) SACs by means of Statutory Instrument has begun. While this process is ongoing the term SAC will be used, in conformance with nomenclature used in NPWS databases.

Article 6(4) states:

"If, in spite of a negative assessment of the implications for the [Natura 2000] site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, Member States shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted."

1.3 Public Authorities and AA

The duties of public authorities in relation to nature conservation are laid out principally in Article 27 of the Habitats Regulations 2011. Uisce Éireann is defined as a 'public authority' for the purposes of the 2011 Regulations.

The first step of the AA process is to carry out a screening to establish whether, in relation to a particular plan or project, if there is potential for likely significant effects (LSEs) to any European site(s). Specifically, Regulation 42(1) states:

"A screening for Appropriate Assessment of a plan or project for which an application for consent is received, or which a public authority wishes to undertake or adopt, and which is not directly connected with or necessary to the management of the site as a European site, shall be carried out by the public authority to assess, in view of best scientific knowledge and in view of the conservation objectives of the site, if that plan or project, individually or in combination with other plans or projects is likely to have a significant effect on the European site."

Regulation 42(6) states that:

"The public authority shall determine that an Appropriate Assessment of a plan or project is required where the plan or project is not directly connected with or necessary to the management of the site as a European site and if it cannot be excluded, on the basis of objective scientific information following screening under this Regulation, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site"

In the context of Article 6(3), Uisce Éireann must carry out screening for AA of the WSSP 2050 to assess whether, on the basis of objective scientific information, the plan individually or in-combination with other plans or projects, is likely to have a significant effect on a European site. If this screening determines that it cannot be excluded, on the basis of objective scientific information, that the Plan, individually or in combination with other plans or projects, will have a significant effect on a European site, then Uisce Éireann must determine that an Appropriate Assessment of the plan is required.

To assist Uisce Éireann in carrying out any Appropriate Assessment that may be required following screening, Uisce Éireann must prepare a Natura Impact Statement (NIS), which is a report comprising the scientific examination of a plan or project and the relevant European site or European sites, to identify and characterise any possible implications of the plan or project individually or in combination with other plans or projects in view of the conservation objectives of the site or sites, and any further information including, but not limited to, any plans, maps or drawings, scientific information or data required to enable the carrying out of an Appropriate Assessment.

In carrying out the full AA, the Habitats Regulations 2011 require Uisce Éireann to take into account:

- The NIS;
- Any other plans or projects that may, in combination with the plan or project under consideration, adversely affect the integrity of a European site;
- Any supplemental information furnished in relation to any such report or statement;
- If appropriate, any additional information furnished in relation to the NIS;

- Any information or advice obtained by Uisce Éireann;
- If appropriate, any written submissions or observations made to Uisce Éireann in relation to the application for consent for the Plan; and
- Any other relevant information.

Following the Appropriate Assessment process, Uisce Éireann must then only adopt the Plan after having determined that the Plan shall not adversely affect the integrity of any European site(s).

1.4 Overlap with Strategic Environmental Assessment (SEA)

The SEA Directive (2001/42/EC) set out a process for the environmental assessment of plans and programmes and aims to provide for a high level of protection of the environment and to promote sustainable development. It also sets out specific requirements with respect to the Habitats Directive (92/43/EEC) and Birds Directive (2009/42/EC).

The SEA Directive is implemented in Ireland via the European Communities (EC) (Environmental Assessment of Certain Plans and Programmes) Regulations 2004, as amended by the EC (Environmental Assessment of Certain Plans and Programmes) (Amendments) Regulations 2011 (known as the 'SEA Regulations'). Under these regulations, qualifying plans such as the WSSP 2050 are required to be subject to SEA screening as a first step to determine if SEA is required. A screening review has been undertaken following the EPA 2021 screening guidance and this confirmed that the WSSP 2050 requires an SEA. The subsequent stages include scoping, assessment, public consultation and monitoring.

The aim is that the SEA process should influence and improve the plan. The process involves assessing the likely significant effects on the environment of implementing the plan and considering reasonable alternatives for achieving plan objectives. Combined and cumulative effects of the plan as a whole and with other plans and programmes are also included as part of the assessment. The SEA Regulations set out specific requirements for consultation with Environmental Authorities including transboundary environmental authorities, at the scoping stage and for public consultation on the draft plan and SEA Environmental Report. The SEA Environmental Report and consultation responses are also required to be taken into account in finalisation of the plan and for implementation monitoring.

There is a degree of overlap between the requirements of the SEA and AA (.1 overleaf) and in accordance with best practice, an integrated approach is being applied between the development of the WSSP 2050, the SEA and the AA, such as sharing of baseline data, cohesive assessment of the potential ecological effects of the WSSP 2050 on European sites and clarification on more technical aspects of the WSSP 2050. These processes together will inform and shape the development of the WSSP 2050.

In-line with Article 9 (5) of the SEA Regulations (S.I. No. 435 of 2004), the SEA Scoping Report will be issued to the following statutory Environmental Authorities for their review and comment:

- The Environmental Protection Agency (EPA);
- The Department of Agriculture, Food and the Marine (DAFM);
- The Department of Housing, Local Government and Heritage (DHLGH) including the Development Applications Unit; and
- The Department of the Environment, Climate and Communications (DECC).

As there is the potential to interface with Northern Ireland and the possibility of transboundary impacts, the SEA Scoping Report will also be issued to Northern Ireland's Department of Agriculture, Environment and Rural Affairs (DAERA) for consultation on transboundary environmental effects.

1.5 Consultation

The WSSP 2050 will be developed following two phases of consultation. An initial statutory consultation on the WSSP Issues Paper, SEA Scoping Report (as indicated above) and the AA Screening Report. For this period of consultation, Uisce Éireann will engage directly with key statutory and regulatory stakeholders. Feedback received on the Issues Paper and the SEA Scoping Report and the AA Screening Report, will be reviewed and taken into account as the draft WSSP 2050, SEA Environmental Report and NIS are prepared. As part of the second phase of consultation, Uisce Éireann will carry out a public consultation on the draft WSSP 2050 together with the SEA Environmental Report and NIS (AA process) in Spring 2024.

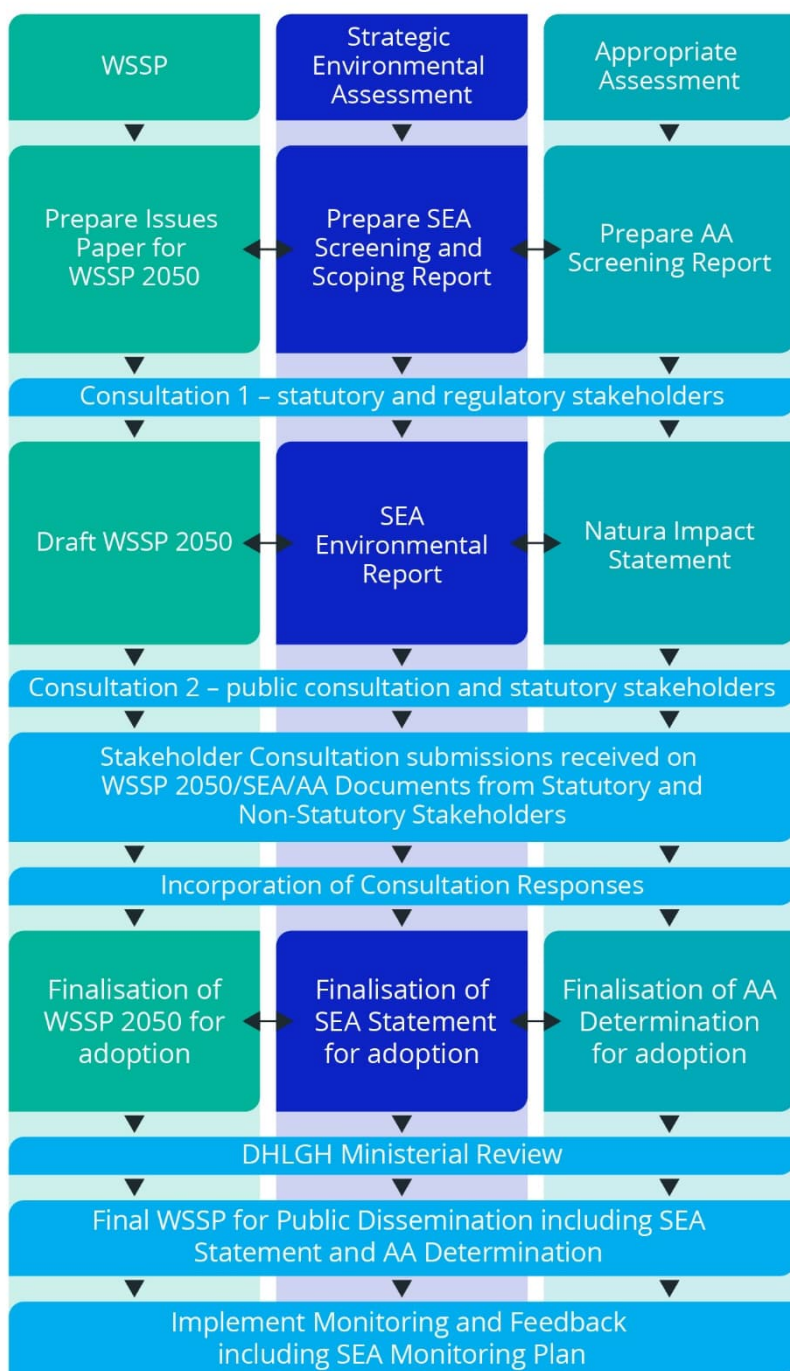


Diagram 1.1: Project Deliverables and sequencing strategy

2 AA Methodology

2.1 Guidance Documents in Relation to AA

The AA requirements of Article 6 of the EU Habitats Directive (European Commission, 2021) follow a sequential approach as outlined in the following guidance documents and Departmental Circulars, namely:

Guidance Documents

The preparation of the screening for AA has taken account of guidance contained in the following documents:

- AA of Plans and Projects in Ireland: Guidance for Planning Authorities. DEHLG (2010).
- Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission (2021).
- Appropriate Assessment Screening for Development Management. OPR Practice Note PN01. (Office of the Planning Regulator, 2021).
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- Marine Natura Impacts Statements in Irish Special Areas of Conservation. A working Document. Department of Arts, Heritage & the Gaeltacht (DAHG) (2012).
- Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. European Commission (2018).

Departmental/National Parks and Wildlife Services (NPWS) Circulars

- AA under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPWS 1/10 and PSSP 2/10.
- AA of Land Use Plans. Circular Letter SEA 1/08 & NPWS 1/08.
- Compliance Conditions in respect of Developments requiring (1) Environmental Impact Assessment (EIA); or (2) having potential impacts on Natura 2000 sites. Circular Letter PD 2/07 and NPWS 1/07.
- Guidance on Compliance with Regulation 23 of the Habitats Directive. Circular Letter NPWS 2/07.
- Water Services Investment and Rural Water Programmes – Protection of Natural Heritage and National Monuments. Circular L8/08.

Data Sources Informing the AA Screening

The following general sources of information have been consulted for background environmental information:

- Online data available on European sites as held by the NPWS from www.npws.ie – including site synopsis, conservation objectives and other relevant supporting documentation.
- GIS data for European site boundaries obtained in digital format online from the NPWS (downloaded July, 2023).
- Favourable reference ranges and tabulated threats and pressures for QI species/habitats in the NPWS latest national conservation status assessments (NPWS, 2019a, 2019b).
- Northern Ireland Environment Agency – online European site information www.doeni.gov.uk.

2.2 Stages of AA

In-line with EU guidance (EC, 2021), the AA process can be broken down into four stages:

- Stage 1: Screening for AA/Test of Likely Significant Effects.
- Stage 2: Appropriate Assessment.
- Stage 3: Alternative Solutions.
- Stage 4: Reasons of Overriding Public Interest (IROPI).

Stage 1: Screening for AA/Test of Likely Significant Effects

Stage 1 identifies whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a European site. If the effects are deemed to be significant, potentially significant, or uncertain, or if the screening process becomes overly complicated, then the process must proceed to Stage 2 (AA). Screening should be undertaken without the inclusion of mitigation, unless potential impacts clearly can be avoided through the modification or redesign of the plan or project.

As the mere possibility of there being a significant effect on the site will trigger the need for an Appropriate Assessment, this decision can be taken either after a thorough examination of the plan or project, or on the basis of a simple analysis where it is already anticipated that there are likely to be significant effects (due to the type, size or scale of the plan or project, the characteristics of the European site or because of a high risk of combined effects with other plans or projects). This will enable the Appropriate Assessment to start as soon as possible (EC Guidance, 2021).

Stage 2: AA

Stage 2 assesses whether the plan or project, alone or in combination with other projects or plans, will have adverse effects on the integrity of a European site, and includes any mitigation measures necessary to avoid, reduce or offset negative effects.

Stage 3: Alternative Solutions

Stage 3 examines any alternative solutions or options that could enable the plan or project to proceed without adverse effects on the integrity of a European site.

Stage 4: Reasons of overriding public interest (IROPI)

Stage 4 examines whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project that will have adverse effects on the integrity of a European site to proceed in cases where it has been established that no less damaging alternative solution exists. Compensatory measures must be proposed and assessed, and the Commission must be informed of the compensatory measures. Compensatory measures must be practical, implementable, likely to succeed, proportionate and enforceable, and they must be approved by the Minister.

Not all stages of the process will be required in all cases.

2.3 Conservation Objectives

The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of annexed habitats and annexed species (Qualifying Interest) of community interest for which an SAC or SPA has been designated. The Conservation Objectives (COs) for a European site are set out to ensure that the Qualifying Interests (QIs) of that site are maintained or restored to a favourable conservation condition. Maintenance of favourable conservation condition of habitats and species at a site level in turn contributes to maintaining or restoring favourable conservation status of habitats and species at a national level and ultimately at the European site network level.

Detailed site synopses for each European site are available from the NPWS website. In Ireland 'generic' COs have been prepared for all European sites, while 'site specific' COs have been prepared for a number of individual sites to take account of the specific QIs of that site. Both the generic and the site-specific COs aim to define the favourable conservation condition for habitats and species at the site level³. Generic COs which have been developed by NPWS encompass the spirit of site-specific COs in the context of maintaining and restoring favourable conservation condition as follows:

- For SACs: 'To maintain or restore the favourable conservation condition of the Annex I habitats and/or Annex II species for which the SAC has been selected'.
- For SPAs: 'To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for the SPA'.

Following from this favourable conservation status (or condition, at a site level) of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing;
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future; and
- the conservation status of its typical species is "favourable".

The favourable conservation status (or condition, at a site level) of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

A full list of the COs and QIs/SCIs that each European site is designated for, as well as the attributes and targets to maintain or restore the QIs/SCIs to a favourable conservation condition are available from the NPWS website⁴.

³ <https://www.npws.ie/protected-sites> [accessed August 2023]

⁴ <https://www.npws.ie/protected-sites/conservation-management-planning/conservation-objectives> [accessed August 2023]

3 Development of the Water Services Strategic Plan

3.1 Water Services Strategic Plan Requirements

Article 33 (4) of the Water Services (No. 2) Act 2013 requires that the WSSP will state the objectives of Uisce Éireann in relation to the provision by Uisce Éireann of water services and the means by which Uisce Éireann proposes to achieve those objectives. The Water Services Act also specifies the aspects of water services which we must address in the WSSP and are as follows:

- a) Drinking water quality;
- b) The prevention or abatement of risks to human health or the environment relating to the provision of water services;
- c) The existing and projected demand for water services;
- d) Existing and planned arrangements for the provision of water services by Uisce Éireann;
- e) Existing and reasonably foreseeable deficiencies in the provision of water services by Uisce Éireann;
- f) Existing and planned water conservation measures; and
- g) The management of the property of Uisce Éireann.

The WSSP sets the overarching framework for subsequent more detailed implementation plans including for example the National Water Resource Plan (NWRP) and National Sludge Strategy and programmes such as the Small towns & Villages Programme.

3.2 WSSP 2050 and Hierarchy of Plans

The **Water Framework Directive (WFD)** is the overarching Directive relating to water policy in the EU. Under this, the WSSP is one of a suite of plans guiding the delivery of water and wastewater services in Ireland as outlined below and in Figure 3.1.

- The **Water Services Policy Statement (WSPS)** provides the framework within which the funding and investment plans are agreed. It sets out the priorities of Government regarding the provision of water services during the period of a Strategic Funding Plan.
- The **Water Services Strategic Plan (WSSP)** sets out Uisce Éireann's objectives for the 25 years following the approval of the plan by the Minister and the means by which Uisce Éireann will achieve them.
- The **Strategic Funding Plan (SFP)** presents the arrangements that Uisce Éireann propose to make and the measures that are proposed, over a five-year period, to implement the objectives of the WSSP. The SFP is approved by the Minister for Housing, Local Government and Heritage. The current SFP covers the period from 2019 to 2024.
- Whilst the SFP sets out the planned level of operational and capital expenditure over this period, the actual allowed operational capital expenditure is decided on by the economic regulator, the Commission for Regulation of Utilities through the **economic regulatory process**.
- A variety of strategic **implementation plans** guide how Uisce Éireann deliver its work, beneath which sit their specific programmes and projects which they implement across the country.

This framework of strategies and plans creates a clear line of sight through Uisce Éireann, making it clear how a specific project can influence all tiers of the organisation, right through to the WSSP 2050 vision.



Figure 3.1: Interaction of plans and projects

3.3 Issues Paper for the WSSP 2050

An Issues Paper has been drafted to support the development of the WSSP 2050. It summarises the key issues influencing Uisce Éireann and the services it delivers from now to 2050. It is not intended to define solutions or strategies to address those issues. These will be presented in the Draft WSSP 2050 which will go out for public consultation in early 2024.

An issue is an opportunity or threat, now or in the future, which has the potential to significantly affect Uisce Éireann and the services it provides to its customers.

In 2022, Uisce Éireann commissioned Vision 2050, a study which included a systematic, in-depth horizon scan of issues that have the ability to significantly affect the Irish water sector in the period to 2050. Uisce Éireann worked with a range of stakeholders through interviews and workshops to identify and explore how issues could act and interact to influence scenarios of the future.

Using the feedback from stakeholders and outputs from Vision 2050 as a starting point Uisce Éireann has identified what it thinks are the most important issues likely to significantly affect Uisce Éireann over the period to 2050:

- Climate change
- Awareness and behaviours
- Circular economy
- Digitalisation, data and cyber
- Environment and biodiversity crises
- Legislation, policy and regulation
- Existing assets and new approaches to service delivery

To identify these key issues, Uisce Éireann considered six ways in which an issue might influence Uisce Éireann and in turn the services it delivers to our customers:

The extent to which an issue;

1. changes customer demand for existing services
2. creates new or changed customer and/or regulator expectations or requirements
3. significantly affects Uisce Éireann staff
4. significantly affects physical assets and systems
5. significantly affects the natural environment
6. significantly affects Uisce Éireann supplies or supply chain

3.3.1 Summary of the Seven Issues

Each of the seven issues is discussed further in the Issues Paper published for consultation and are summarised below.

Issue 1 - Climate Change

Climate change is acknowledged as a “climate crisis” that is a defining challenge today and for future generations. At current levels of global greenhouse gas emissions, the world remains on course to exceed the Paris Agreement’s temperature thresholds of either 1.5°C or 2°C above pre-industrial levels. Ireland’s climate is changing in a number of ways; annual precipitation is higher, sea levels have risen and river flows are generally increasing.

Changes in climate have direct and indirect influences on Uisce Éireann and the services it provides. For instance, increased demand for water, changes in water availability, increased fluvial and coastal flood and erosion risk.

Issue 2 - Awareness and Behaviours

The awareness that customers, stakeholders and the broader public have of issues can influence their behaviour and their acceptance of standards of service. Raising awareness about environmental, social and economic issues related to water and how the individual's behaviour influences this can therefore actively contribute to the protection and sustainable management of water.

There is a strong need to ensure water is part of this public call to action. With growing challenges of water shortages and sustainability, there is a need to create wider awareness around the value of water. Knowledge sharing, collaboration and coordination across stakeholders, in order to build meaningful engagement with society around the fundamental value of water can encourage behavioural change.

Issue 3 - Circular Economy

The circular economy is a model of production and consumption which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible. It applies at all scales, from local to global. The development of circular economy principles will affect all sectors of society and collaboration between stakeholders will be key to this transition in Ireland.

Some examples of how the water sector may be changed by the progressive adoption of circular economy principles are as follows; embedding circular economy in design, encouraging the efficient use of water, reusing recovered water (treated wastewater), utilising resources in wastewater and sludge, minimising use of consumables, generating and using renewable energy, and protecting and regenerating nature.

Issue 4 - Digitisation, Data and Cyber

The growth of solutions exploiting data and digitalisation, automation and robotics present huge opportunities for the water sector in terms of performance, efficiency, sustainability, cost, and engaging with customers. Aligning application of data and digital technologies and solutions across the water sector and beyond also presents a significant opportunity to achieve more than organisations can in isolation. This broad transformation which influences the whole economy also presents challenges in the form of cyber security and data integrity.

Issue 5 - Environment and Biodiversity Crises

Although Ireland declared a climate and biodiversity emergency in 2019, the EPA believes many of Ireland's agreed environmental targets will not be met in the short term or will be delivered late. Despite progress in some areas, the EPA believes that the scale and speed of improvements being made are insufficient to meet long-term EU and national objectives for water quality, air quality, nature protection and emissions reduction.

The Irish Government has identified five main drivers of biodiversity loss in Ireland. These are intensive agricultural and forestry practices, overfishing, invasive species, changes in land use, and the over-exploitation of resources such as peatland.

Agricultural runoff discharges fertilisers and pesticides into waterbodies, urban runoff discharging pollutants and sediments to the environment, and discharges of insufficiently treated wastewater to rivers has the potential to affect Uisce Éireann in a number of ways; water treatment, wastewater management and stormwater management.

Issue 6 - Legislation, Policy and Regulation

Future legislative, policy and regulatory change will significantly influence how Uisce Éireann delivers services. Changes will drive new expectations and requirements, and these are likely to have consequences for Uisce Éireann's physical assets, the aspects of the natural environment upon which Uisce Éireann depend and the supply chain of organisations that support them. Addressing this challenge will require a streamlined

approach which focuses on key issues, and a coordinated and collaborative approach across organisations and sectors.

Uisce Éireann aims to be a leader in developing a sustainable water sector and in doing so, ensuring that they are adaptive to changes in how the sector is regulated.

Issue 7 - Existing Assets and New Approaches to Service Delivery

Uisce Éireann's existing water infrastructure is ageing and their assets need significant maintenance and/or replacement so that they can continue to deliver their services to an appropriate level. A large proportion of the water infrastructure in Ireland was installed decades ago and requires repair, replacement or upgrade.

At the same time, new integrated solutions such as blue/green infrastructure that harness and/or mimic natural processes, and new approaches to delivering solutions in partnership with multiple stakeholders, present opportunities to deliver Uisce Éireann's services in different ways that deliver wider benefits to society.

Sustainability requirements, evolving technology, population growth, climate change and regulation along with wider societal expectations will influence how Uisce Éireann adapts to deliver services in the future at acceptable costs.

3.3.2 Summary of the Four Themes

Uisce Éireann's initial thinking is that the **seven issues** can be addressed through the **four themes** presented in (Figure 3.2) and summarised below.

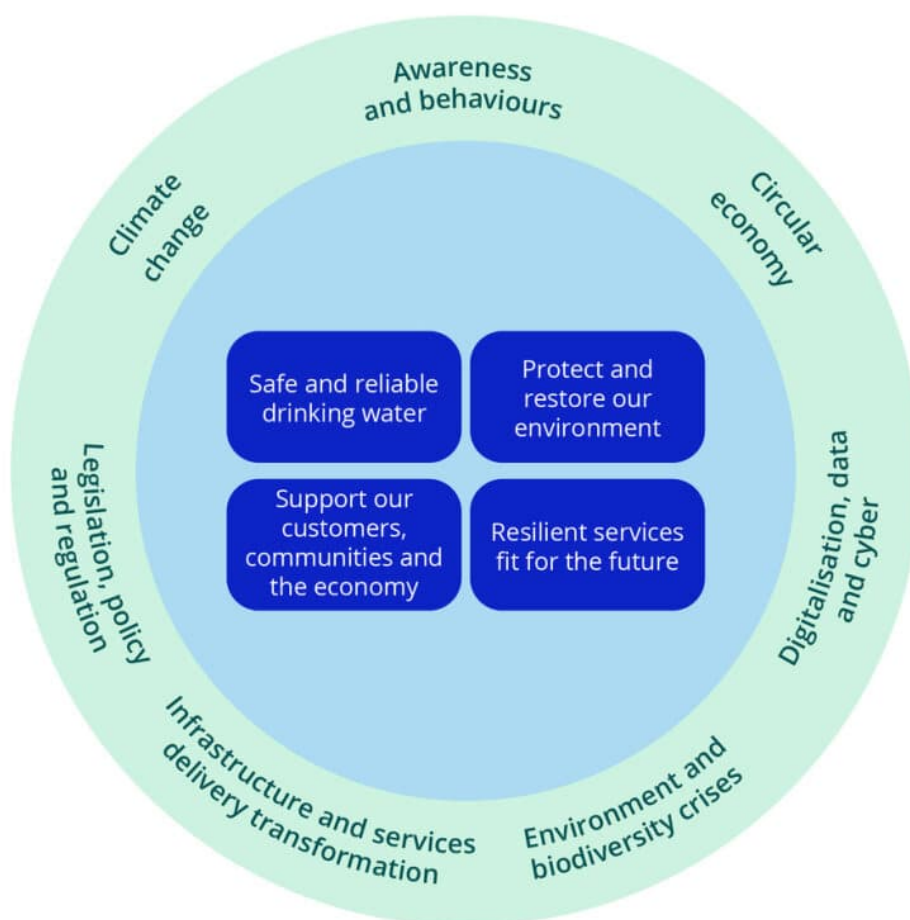


Figure 3.2 WSSP 2050 Issues Paper – four themes addressing the seven issues

Theme 1 - Safe and reliable drinking water

Safe and reliable water supplies are essential to public health and to social and economic progress. The water needed must be abstracted from surface or groundwater sources and treated to a high standard before it is distributed through an extensive network of water mains to households and businesses. Ensuring the quality and reliability of water supplies is a primary requirement for Uisce Éireann.

Theme 2 - Protect and restore our environment

Protecting and restoring the quality of the water environment is fundamental for providing safe water services and for the protection of human health and biodiversity. Ensuring an effective wastewater management system is also essential to protect the environment and public health.

By working with others to protect and restore the water environment, Uisce Éireann can reduce the requirement for water treatment and support recreational activities, biodiversity, tourism and the natural character of our countryside.

Theme 3 - Support our customers, communities and the economy

Uisce Éireann must meet our customers' expectations through the provision of high quality, reliable water and wastewater services, delivered through resilient systems, in an economic and efficient manner, reflecting the service levels our customers expect. High-quality water and wastewater services are also important in maintaining Ireland's competitiveness for industry and commercial activity.

Theme 4 - Resilient services fit for the future

Uisce Éireann's approach to managing our assets aims to optimise the value obtained from them by optimising performance, risk and cost across the asset lifecycle. By improving the understanding of the health of assets and by exploiting new technologies, Uisce Éireann can better manage our existing assets and target investment in new assets where it is most needed.



4 Stage 1 Screening

This Screening for AA was informed by a desk study of all relevant environmental information and involved the following steps (broadly based on (European Commission, 2021)):

- Determined if the proposed plan is directly connected with or necessary to the management of the site;
- Description of the proposed plan;
- Identification of relevant European site(s);
- Assessment of likely effects on European sites; and
- Screening conclusion.

4.1 Is the WSSP 2050 Exempt from Assessment?

The WSSP 2050, whilst it will seek to protect the environment, is not a plan that is required for the management of any European site and therefore is not exempt from assessment under the Habitat Regulations, 2011.

4.2 Description of the WSSP 2050

An overview of the WSSP 2050 and its development is outlined in Section 3 above.

4.3 Identification of Relevant European Sites

Natura 2000 Site Network in Ireland

Sites within the Natura 2000 network are referred to as European sites and comprise SACs and SPAs. SACs are designated for the conservation of Qualifying Interests (QI) Annex I habitats and Annex II species (other than birds). SPAs are designated for the conservation of Annex I birds and other regularly occurring migratory birds and their habitats. The Natura 2000 site network in Ireland covers 125 species and 60 habitats. For 101 sites in the network there is only one feature being protected with 79 sites having more than 20 features.

There are over 430 SACs in Ireland covering an area 13,500km² (see Figure 4.1 and the Screening Report, Appendix A). Approximately 53% is land, the remainder of sites being wholly aquatic or water-dependent (lakes, ponds, reservoirs, rivers, streams and wetlands). Aquatic species and habitats, and species that these features support, will be particularly relevant to the WSSP 2050. Over 150 SPAs (see Figure 4.1 and Appendix A) have been designated for the protection of bird species and their habitats encompassing over 570,000 hectares of marine and terrestrial habitats. Many of the sites designated as SPAs have associated aquatic supporting habitat.

Given the potential for transboundary impacts to SACs and SPAs in Northern Ireland these sites are also considered (see Figure 4.1 and Appendix A). Table 4.1 provides a breakdown of European sites in Ireland.

Table 4.1: Number of European Sites in Ireland and Northern Ireland

Ireland	Northern Ireland
433 SACs + 6 offshore SACs	58 SACs
166 SPAs	16 SPAs

Special Areas of Conservation

SACs have been designated covering a variety of habitat types recognised in Annex I of the Directive, with 16 habitats designated as 'priority' habitats owing to their ecological vulnerability (NPWS, 2019a). In addition, the same Directive, recognises 26 Annex II species. Habitats for which SACs are designated include raised bogs, blanket bogs, turloughs, sand dunes, lakes, rivers, woodlands, estuaries etc. Some of the species for which SACs have been designated include but are not limited to Atlantic salmon (*Salmo salar*), otter (*Lutra lutra*), bottlenose dolphin (*Tursiops truncatus*), freshwater pearl mussel (*Margaritifera margaritifera*) and Killarney fern (*Trichomanes speciosum*).

The NPWS have identified 44 different water dependent habitat types and 22 water dependent species. Of these the freshwater pearl mussel is considered to be a highly sensitive surface water dependent species in Ireland, and is in decline (EPA, 2020). In Ireland 367 SACs have at least one water dependent Annex I listed habitat or Annex II listed species listed as a Qualifying Interest (Mayes, 2008).

Special Protection Areas

The majority of the breeding seabirds and wintering water birds are considered to be regularly occurring migratory birds; over 60% of 25 Annex I listed species that occur in the Ireland on a regular basis belong to the breeding seabird and wintering water bird groups. This has in part led to the situation that the majority (>80%) of Ireland's SPAs are designated for these two bird groups (NPWS, n.d.⁵)

The marine areas within SPAs include some of the productive intertidal zones of bays and estuaries that provide vital food resources for several wintering wader species including dunlin (*Calidris alpina*), knot (*Calidris canutus*) and bar-tailed godwit (*Limosa lapponica*). Marine waters adjacent to the breeding seabird colonies and other important areas for seaducks, divers and grebes are also included in the SPA network.

The remaining SPAs include inland wetland sites important for wintering water birds and extensive areas of blanket bog and upland habitats that provide breeding and foraging resources for species including merlin (*Falco columbarius*) and golden plover (*Pluvialis apricaria*). Agricultural land represents a share of the SPA network ranging from the extensive farmland of upland areas where its hedgerows, wet grassland and scrub offer feeding and/or breeding opportunities for hen harrier (*Circus cyaneus*) to the intensively farmed coastal polderland where internationally important numbers of swans and geese occur.

Water Framework Directive

There is some overlap with the Birds Directive, the EU Habitats Directive and the Water Framework Directive (WFD) in relation to the protection of water dependent habitats and species. Under the WFD areas are designated for the protection of habitats or species where the maintenance or improvement of the status of water is an important factor in their protection, including relevant European sites. The linkages between the Habitats and Birds Directive and the WFD were discussed in a document published by the European Commission (2011) which states:

"Any Natura 2000 site with water-dependent (ground- and/or surface water) Annex I habitat types or Annex II species under the Habitats Directive or with water-dependent bird species of Annex I or migratory bird species of the Birds Directive, and, where the presence of these species or habitats has been the reason for the designation of that protected area, has to be considered for the register of protected areas under WFD Art. 6. These areas are summarised as "water-dependent Natura 2000 sites". For these Natura 2000 sites, the objectives of BHD and WFD apply".

⁵ <https://www.npws.ie/protected-sites> [accessed August 2023]

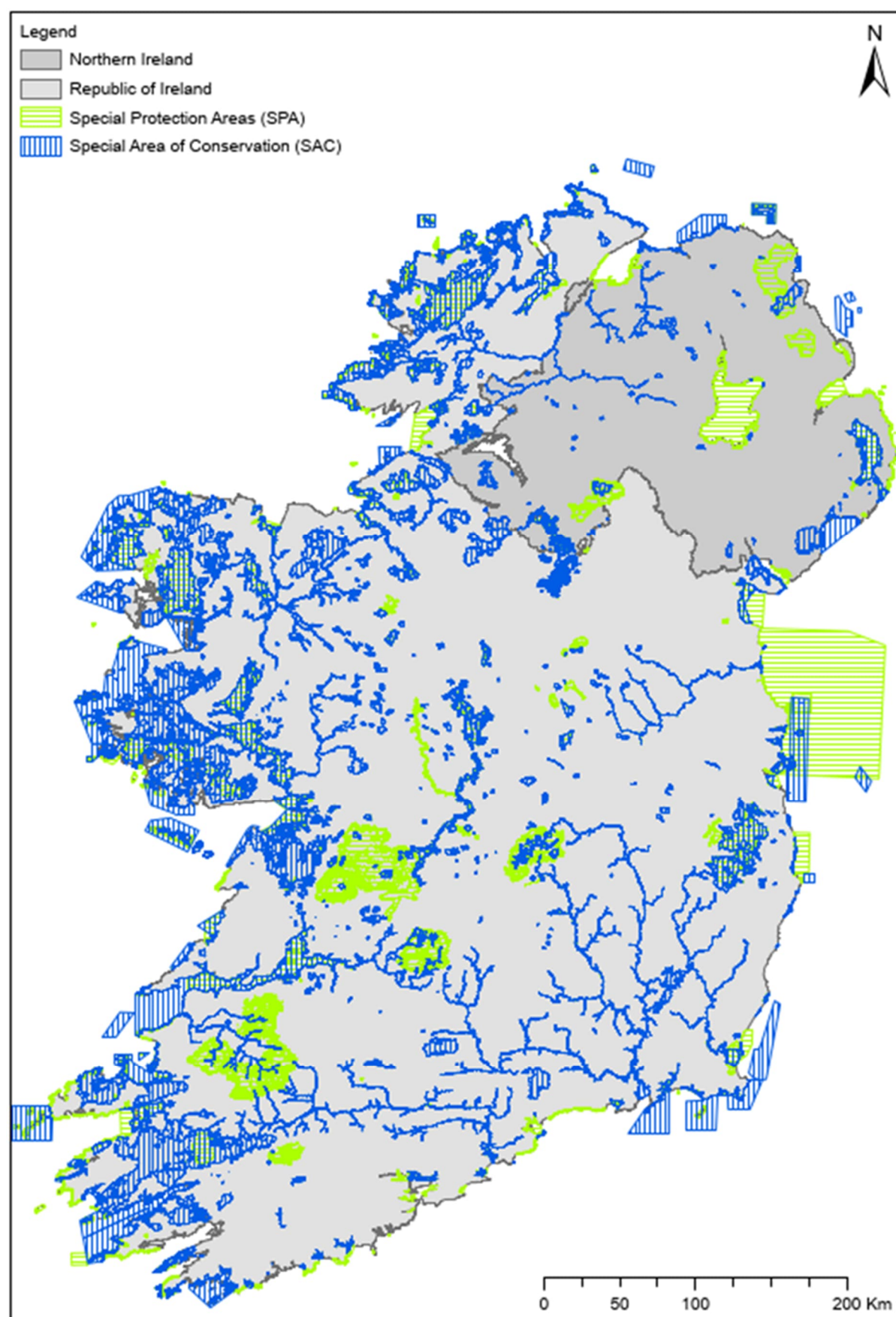


Figure 4.1: Distribution of European Sites on the Island of Ireland

4.4 Elements of the WSSP 2050 with Potential for Likely Significant Effects

The WSSP 2050 is a high-level plan for the development of water services in Ireland. It is a national strategy that does not refer to specific geographic locations or individual projects. However, the WSSP 2050 will provide an indication of the types of infrastructural requirements likely to arise in the future through the implementation of subsequent more detailed plans including for example the National Water Resource Plan and National Sludge Strategy and any specific programmes and projects which are progressed as part of these plans. It will also provide an indicative overview of the general objectives for Uisce Éireann over a 25-year period.

Whilst the WSSP 2050 may not itself, being a high-level plan, result in likely significant effects (LSEs) on European sites, the types of activities that Uisce Éireann will be responsible for during and resulting from the implementation of the WSSP 2050 may do. These activities can be categorised into two broad groups, relating to either water supply or wastewater treatment (Table 4.2). Other activities with potential for impacts include water conservation and demand management, catchment management and other supporting or associated measures as well as property management.

Table 4.2: General Activities of Uisce Éireann

General Activity	Specific Activities
Water Supply	<ul style="list-style-type: none">• (Raw) Water abstraction (from surface or groundwater).• Treatment of raw water to a potable water standard (the level of treatment required will depend on the quality of raw water abstracted).• Storage of raw and treated water.• Distribute treated water to customers through a pipe network.• Water treatment residuals management.• Construction, operation, maintenance and management of the above.
Wastewater Treatment	<ul style="list-style-type: none">• Collection of wastewater from customers connected to the public wastewater sewer network.• Collection and treatment of surface water where surface water drains are currently connected to the public sewer network.• Treatment of wastewater to an acceptable standard set by legislation (the level of treatment required will depend on the type of receiving water and its assimilative capacity).• Discharging treated wastewater to surface or groundwater under licence/certification.• Wastewater sludge management.• Construction, operation, maintenance and management of the above.

Table 4.3 outlines the possible likely significant effects associated with the WSSP 2050. The implementation of the WSSP 2050 may give rise to measures, in the absence of mitigation, that could result in a variety of possible effect pathways through, but not limited to:

- species mortality;
- habitat loss and/or fragmentation;
- barriers to species movement;

- disturbance (noise, vibration, movement, lighting);
- changes in water quality;
- changes in hydrology; and
- transfer of non-native species,

Impacts may be short-term or long-term and, in some cases, short-term impacts may have long term effects on a qualifying interest.

More information on possible effects pathways and impacts is provided below. A summary of impacts and potential LSEs is presented in Table 4.3.

Species Mortality

Species mortality may occur during infrastructure construction activities or as a result in changes to water quality. Mortality may also occur as a result of the loss of prey species or through the fragmentation of habitats resulting in barriers to species movement.

Habitat Loss/Fragmentation and Barriers to Movement

New infrastructure may result in the loss and/or fragmentation of habitat (including habitat that supports qualifying interests). It may also create barriers to movement of species, such as salmon, resulting in loss or changes to populations. These impacts may also affect the prey species of qualifying interests.

New or increased water abstraction may also result in the loss and/or fragmentation of habitats.

Disturbance

The construction of new infrastructure may lead to the disturbance of species altering their populations and/or distribution. Disturbance may take the form of, for example, noise and vibration, lighting and movement. This disturbance could affect terrestrial or aquatic animal species across a range of habitats and locations. Depending on the type of infrastructure, disturbance could be short-term or long-term.

Changes in Water Quality

Changes in water quality may occur for a variety of reasons including spillages and run-off, sedimentation and wastewater discharges. These changes may occur during construction of new infrastructure or as a result of changes in water flows (pathways). Changes in water quality may result in the mortality of qualifying species and/or their prey. It may also result in the loss of qualifying or supporting habitats.

Changes in Hydrology

Hydrological changes may directly affect aquatic habitats changing the ecological functionality of systems and the species they support. Hydrological changes may also alter the distribution of habitats thus affecting the distribution and population of species. Hydrological changes may result from new or enhanced abstractions, or from new infrastructure.

Transfer of Non-Native Species

The distribution and transfer of water and the collection, treatment and discharge of wastewater may lead to the transfer of non-native species. If invasive, these species may alter habitats or displace species. These changes may affect directly qualifying habitats and species or the ecological functionality of systems.

Table 4.3: Potential Impacts and LSEs resulting from Typical Activities associated with WSSP 2050

WSSP Related Activity	Potential Impacts	Potential LSE and Pathways
New or enhanced water abstraction¹⁴ from surface water or groundwater locations.	<p>Reduction of habitat area including complete loss as well as habitat change.</p> <p>Reduction in species population (including prey species) altering distribution or complete loss.</p>	<p>Where new abstractions are required there is potential for direct, indirect, construction, operational and cumulative effects on SACs and SPAs in the absence of mitigation. Aquatic and water dependent receptors would be most at risk.</p> <p>Habitats and the species supported by them may change resulting in population and distribution changes. This may also affect the prey species of qualifying interests.</p> <p>All sites which contain surface and/or groundwater dependent habitats and species that are hydrologically linked to abstractions would be potentially affected.</p>
Development of new water services infrastructure including reservoirs, pipelines and wastewater treatment plants.	<p>Species mortality (including prey species).</p> <p>Loss/change in habitat area.</p> <p>Disturbance (short-term or long-term) to species.</p> <p>Habitat fragmentation including barrier effects to species movement.</p> <p>Hydrological changes to aquatic environments.</p> <p>Transfer of invasive non-native species.</p>	<p>Changes in hydrology potentially altering the aquatic environment and impacting on aquatic receptors.</p> <p>Habitats and the species supported by them may change resulting in population and distribution changes. This may also affect the prey species of qualifying interests.</p> <p>Invasive non-native species may result in habitat and/or species replacement altering ecological functionality of sites.</p> <p>Potential for direct, indirect, construction, operational and cumulative effects on SACs and SPAs in the absence of mitigation.</p>
Discharge of treated wastewater	<p>Reduction of habitat area.</p> <p>Reduction in species density.</p> <p>Habitat fragmentation.</p>	<p>There is potential for direct, indirect, construction, operational and cumulative effects on SACs and SPAs that contain water dependent habitats and species which are hydrologically linked to wastewater treatment plants (WwTPs).</p> <p>Habitats and the species supported by them may change resulting in population and distribution changes. This may also affect the prey species of qualifying interests. Aquatic and water dependent receptors would be most at risk.</p> <p>Potential for direct, indirect, operational and cumulative effects on SACs and SPAs in the absence of mitigation.</p>

¹⁴ At the end of 2022, the government passed the Water Environment (Abstractions and Associated Impoundments) Act, 2022 (the Abstractions Act) , which will ensure that national abstractions align with the requirements of the Water Framework Directive. The Abstractions Act has not yet commenced and the associated regulations and guidelines which will further detail the types of assessment and national methodology to be used are not yet published or in place.

4.5 In-Combination Effects

Under Article 6(3) of the EU Habitats Directive an assessment of in-combination effects of the WSSP 2050 with other plans and projects is considered. Consideration has been given, at this stage of the WSSP 2050, to other relevant plans on a similarly strategic level that have clear potential to have an in-combination effect upon European Sites. These plans include the following:

- Ag Climatise – A Roadmap towards Climate Neutrality (DAFM).
- Catchment Flood Risk Assessment and Management (CFRAM) Programme.
- Climate Action Plan 2023 (Department of the Environment, Climate and Communications (DECC)).
- Forestry Programme 2023-2027 (DAFM).
- National Adaptation Framework (NAF) (DECC).
- National Biodiversity Action Plan 2017-2021 (NPWS).
- National Development Plan 2021-2030 (Department of Public Expenditure, NDP Delivery and Reform).
- National Marine Planning Framework (Department of Housing, Planning and Local Government (DHPLG)).
- National Peatlands Strategy 2015 (NPWS).
- National Planning Framework, Project Ireland 2040 (DHPLG).
- River Basin Management Plan 2018-2021 and Draft River Basin Management Plan 2022-2027 (DHPLG).
- Waste Action Plan for a Circular Economy 2020 (DECC).
- Water Quality and Water Services Infrastructure, Climate Change Sectoral Adaptation Plan (DHLGH),

Given the level of detail that is available for the WSSP 2050 and the potential for likely significant effects (Table 4-3), in-combination effects as a result of implementation of the WSSP 2050 cannot currently be ruled out. Furthermore, some plans, such as the Draft River Basin Management Plan 2022-2027, are in the process of being developed and additional information may become available at a later stage.

The following Northern Ireland and UK plans will also be included in the in-combination assessment:

- Draft Environment Strategy.
- NI Water (2020) Our Strategy 2021-2046.
- NI Water (2020) Water Resource and Supply Resilience Plan.
- Sustainable Water – A Long term water strategy for Northern Ireland (2015 –2040).
- Draft Flood Risk Management Plan 2021-2027 (NI).
- UK Marine Policy Statement.
- Draft 3rd cycle River Basin Management Plan 2021-2027 (NI).

Uisce Éireann's own plans and programmes will be reviewed to align with the WSSP 2050 as they are implemented and updated going forward and are therefore considered generally in terms of intra-Plan assessment.

5 Screening Conclusion

Stage 1 of the AA process (Screening for AA) described herein relates to the WSSP 2050.

Uisce Éireann as a public authority under the Habitat Regulations are required to screen all of their plans and projects. The WSSP 2050 was therefore subject to the requirements of the Regulations and as such Uisce Éireann were required to assess the implications of the WSSP 2050 on European sites in view of the sites' conservation objectives.

The WSSP 2050 is not directly connected to or necessary to the management of any European site.

Given the strategic nature of the WSSP 2050 and the current stage of preparation, it is concluded that there is potential for likely significant effects on one or more European sites, in view of the sites' conservation objectives. At this stage of the AA process all European sites across Ireland and Northern Ireland are screened in.

In the absence of more detailed information on the WSSP 2050 the precautionary principle must be applied. Therefore, in accordance with Article 6(3) of the Habitats Directive, Stage 2 AA of the WSSP 2050 is required. This will be presented in a NIS to fully inform the AA to be undertaken by Uisce Éireann.



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Appendix A: Special Areas of Conservation in Ireland

Site Code	Site Name
IE0000006	Killyconny Bog (Cloghbally)
IE0000007	Lough Oughter and Associated Loughs
IE0000014	Ballyallia Lake
IE0000016	Ballycullinan Lake
IE0000019	Ballyogan Lough
IE0000020	Black Head-Poulsallagh Complex
IE0000030	Danes Hole, Poulnalecka
IE0000032	Dromore Woods and Loughs
IE0000036	Inagh River Estuary
IE0000037	Pouladatig Cave
IE0000051	Lough Gash Turlough
IE0000054	Moneen Mountain
IE0000057	Moyree River System
IE0000064	Poulnagordon Cave (Quin)
IE0000077	Ballymacoda (Clonpriest and Pillmore)
IE0000090	Glengariff Harbour and Woodland
IE0000091	Clonakilty Bay
IE0000093	Caha Mountains
IE0000097	Lough Hyne Nature Reserve and Environs
IE0000101	Roaringwater Bay and Islands
IE0000102	Sheep's Head
IE0000106	St. Gobnet's Wood
IE0000108	The Gearagh
IE0000109	Three Castle Head to Mizen Head
IE0000111	Aran Island (Donegal) Cliffs
IE0000115	Ballintra
IE0000116	Ballyarr Wood
IE0000129	Croaghonagh Bog
IE0000133	Donegal Bay (Murvagh)
IE0000138	Durnesh Lough
IE0000140	Fawnboy Bog/Lough Nacung
IE0000142	Gannivegil Bog
IE0000147	Horn Head and Rinclevan
IE0000154	Inishtrahull
IE0000163	Lough Eske and Ardnamona Wood
IE0000164	Lough Nagreany Dunes
IE0000165	Lough Nillan Bog (Carrickatieve)
IE0000168	Magheradrumman Bog
IE0000172	Meenaguse/Ardbane Bog
IE0000173	Meentygrannagh Bog
IE0000174	Curraghchase Woods SA
IE0000181	Rathlin O'Birne Island
IE0000185	Sessiagh Lough
IE0000189	Slieve League
IE0000190	Slieve Tooley/Tormore Island/Loughros Beg Bay

Site Code	Site Name
IE0000191	St. John's Point
IE0000194	Tranarossan and Melmore Lough
IE0000197	West of Ardara/Maas Road
IE0000199	Baldoyle Bay
IE0000202	Howth Head
IE0000204	Lambay Island
IE0000205	Malahide Estuary
IE0000206	North Dublin Bay
IE0000208	Rogerstown Estuary
IE0000210	South Dublin Bay
IE0000212	Inishmaan Island
IE0000213	Inishmore Island
IE0000216	River Shannon Callows
IE0000218	Coolcam Turlough
IE0000231	Barroughter Bog
IE0000238	Caherglassaun Turlough
IE0000242	Castletaylor Complex
IE0000248	Cloonmoylan Bog
IE0000252	Coole-Garryland Complex
IE0000255	Croaghill Turlough
IE0000261	Derrycrag Wood Nature Reserve
IE0000268	Galway Bay Complex
IE0000278	Inishbofin and Inishshark
IE0000285	Kilsallagh Bog
IE0000286	Kiltartan Cave (Coole)
IE0000295	Levally Lough
IE0000296	Lisnageeragh Bog and Ballinastack Turlough
IE0000297	Lough Corrib
IE0000299	Lough Cutra
IE0000301	Lough Lurteen Bog/Glenamaddy Turlough
IE0000304	Lough Rea
IE0000308	Loughatorick South Bog
IE0000318	Peterswell Turlough
IE0000319	Pollnaknockaun Wood Nature Reserve
IE0000322	Rahasane Turlough
IE0000324	Rosroe Bog
IE0000326	Shankill West Bog
IE0000328	Slyne Head Islands
IE0000330	Tully Mountain
IE0000332	Akeragh, Banna and Barrow Harbour
IE0000335	Ballinskelligs Bay and Inny Estuary
IE0000343	Castlemaine Harbour
IE0000353	Old Domestic Building, Dromore Wood
IE0000364	Kilgarvan Ice House
IE0000365	Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment
IE0000370	Lough Yganavan and Lough Nambrackdarrig
IE0000375	Mount Brandon
IE0000382	Sheheree (Ardagh) Bog

Site Code	Site Name
IE0000391	Ballynafagh Bog
IE0000396	Pollardstown Fen
IE0000397	Red Bog, Kildare
IE0000404	Hugginstown Fen
IE0000407	The Loughans
IE0000412	Slieve Bloom Mountains
IE0000428	Lough Melvin
IE0000432	Barrigone
IE0000439	Tory Hill
IE0000440	Lough Ree
IE0000448	Fortwilliam Turlough
IE0000453	Carlingford Mountain
IE0000455	Dundalk Bay
IE0000458	Killala Bay/Moy Estuary
IE0000461	Ardkill Turlough
IE0000463	Balla Turlough
IE0000466	Bellacorick Iron Flush
IE0000470	Mullet/Blacksod Bay Complex
IE0000471	Brackloon Woods
IE0000472	Broadhaven Bay
IE0000474	Ballymaglancy Cave, Cong
IE0000475	Carrowkeel Turlough
IE0000476	Carrowmore Lake Complex
IE0000479	Cloughmoyne
IE0000480	Clyard Kettle-holes
IE0000484	Cross Lough (Killadoon)
IE0000485	Corraun Plateau
IE0000492	Doocastle Turlough
IE0000495	Duvillaun Islands
IE0000497	Flughany Bog
IE0000500	Glenamoy Bog Complex
IE0000503	Greaghans Turlough
IE0000504	Kilglassan/Caheravoostia Turlough Complex
IE0000507	Inishkea Islands
IE0000516	Lackan Saltmarsh and Kilcummin Head
IE0000522	Lough Gall Bog
IE0000525	Shrule Turlough
IE0000527	Moore Hall (Lough Carra)
IE0000532	Oldhead Wood
IE0000534	Owenduff/Nephin Complex
IE0000541	Skealoghan Turlough
IE0000542	Slieve Fyagh Bog
IE0000566	All Saints Bog and Esker
IE0000571	Charleville Wood
IE0000572	Clara Bog
IE0000575	Ferbane Bog
IE0000576	Fin Lough (Offaly)
IE0000580	Mongan Bog

Site Code	Site Name
IE0000581	Moyclare Bog
IE0000582	Raheenmore Bog
IE0000584	Cuilcagh - Anierin Uplands
IE0000585	Sharavogue Bog
IE0000588	Ballinturly Turlough
IE0000592	Bellanagare Bog
IE0000595	Callow Bog
IE0000597	Carrowbehy/Caher Bog
IE0000600	Cloonchambers Bog
IE0000604	Derrinea Bog
IE0000606	Lough Fingall Complex
IE0000607	Errit Lough
IE0000609	Lisduff Turlough
IE0000610	Lough Croan Turlough
IE0000611	Lough Funshinagh
IE0000612	Mullygollan Turlough
IE0000614	Cloonshanville Bog
IE0000622	Ballysadare Bay
IE0000623	Ben Bulbin, Gleniff and Glenade Complex
IE0000625	Bunduff Lough and Machair/Trawalua/Mullaghmore
IE0000627	Cummeen Strand/Drumcliff Bay (Sligo Bay)
IE0000633	Lough Hoe Bog
IE0000634	Lough Nabrickkeagh Bog
IE0000636	Templehouse and Cloonacleigha Loughs
IE0000637	Turloughmore (Sligo)
IE0000638	Union Wood
IE0000641	Ballyduff/Clonfinane Bog
IE0000646	Galtee Mountains
IE0000647	Kilcarren-Firville Bog
IE0000665	Helvick Head
IE0000668	Nier Valley Woodlands
IE0000671	Tramore Dunes and Backstrand
IE0000679	Garriskil Bog
IE0000685	Lough Ennell
IE0000688	Lough Owel
IE0000692	Scragh Bog
IE0000696	Ballyteige Burrow
IE0000697	Bannow Bay
IE0000700	Cahore Polders and Dunes
IE0000704	Lady's Island Lake
IE0000707	Saltee Islands
IE0000708	Screen Hills
IE0000709	Tacumshin Lake
IE0000710	Raven Point Nature Reserve
IE0000713	Ballyman Glen
IE0000714	Bray Head
IE0000716	Carriggower Bog
IE0000717	Deputy's Pass Nature Reserve

Site Code	Site Name
IE0000719	Glen of the Downs
IE0000725	Knocksink Wood
IE0000729	Buckroney-Brittias Dunes and Fen
IE0000733	Vale of Clara (Rathdrum Wood)
IE0000764	Hook Head
IE0000770	Blackstairs Mountains
IE0000781	Slaney River Valley
IE0000831	Cullahill Mountain
IE0000849	Spahill and Clomantagh Hill
IE0000859	Clonaslee Eskers and Derry Bog
IE0000869	Lisbigney Bog
IE0000919	Ridge Road, SW of Rapemills
IE0000925	The Long Derries, Edenderry
IE0000930	Clare Glen
IE0000934	Kilduff, Devilsbit Mountain
IE0000939	Silvermine Mountains
IE0000979	Corratirrim
IE0000994	Ballyteige (Clare)
IE0000996	Ballyvaughan Turlough
IE0001013	Glenomra Wood
IE0001021	Carrowmore Point to Spanish Point and Islands
IE0001040	Barley Cove to Ballyrisode Point
IE0001043	Cleanderry Wood
IE0001058	Great Island Channel
IE0001061	Kilkeran Lake and Castlefreke Dunes
IE0001070	Myross Wood
IE0001090	Ballyness Bay
IE0001107	Coolvoy Bog
IE0001125	Dunragh Loughs/Pettigo Plateau
IE0001141	Gweedore Bay and Islands
IE0001151	Kindrum Lough
IE0001179	Muckish Mountain
IE0001190	Sheephaven
IE0001195	Termon Strand
IE0001197	Keeper Hill
IE0001209	Glenasmole Valley
IE0001228	Aughrusbeg Machair and Lake
IE0001230	Courtmacsherry Estuary
IE0001242	Carrownagappul Bog
IE0001251	Cregduff Lough
IE0001257	Dog's Bay
IE0001271	Gortnandarragh Limestone Pavement
IE0001275	Inisheer Island
IE0001285	Kiltiernan Turlough
IE0001309	Omey Island Machair
IE0001311	Rusheenduff Lough
IE0001312	Ross Lake and Woods
IE0001313	Rosturra Wood

Site Code	Site Name
IE0001321	Termon Lough
IE0001342	Cloonee and Inchiquin Loughs, Uragh Wood
IE0001371	Mucksna Wood
IE0001387	Ballynafagh Lake
IE0001398	Rye Water Valley/Cartron
IE0001403	Arroo Mountain
IE0001430	Glen Bog
IE0001432	Glenstal Wood
IE0001459	Clogher Head
IE0001482	Clew Bay Complex
IE0001497	Doogort Machair/Lough Doo
IE0001501	Erris Head
IE0001513	Keel Machair/Menaun Cliffs
IE0001529	Lough Cahasy, Lough Baun and Roonah Lough
IE0001536	Mocorha Lough
IE0001547	Castletownshend
IE0001571	Urlaur Lakes
IE0001625	Castlesampson Esker
IE0001626	Annaghmore Lough (Roscommon)
IE0001637	Four Roads Turlough
IE0001656	Bricklieve Mountains and Keishcorran
IE0001669	Knockalongy and Knockachree Cliffs
IE0001673	Lough Arrow
IE0001680	Streedagh Point Dunes
IE0001683	Liskeenan Fen
IE0001741	Kilmuckridge-Tinnaberna Sandhills
IE0001742	Kilpatrick Sandhills
IE0001757	Holdenstown Bog
IE0001766	Magherabeg Dunes
IE0001774	Lough Carra/Mask Complex
IE0001776	Pilgrim's Road Esker
IE0001786	Kilroosky Lough Cluster
IE0001810	White Lough, Ben Loughs and Lough Doo
IE0001818	Lough Forbes Complex
IE0001831	Split Hills and Long Hill Esker
IE0001847	Philipston Marsh
IE0001858	Galmoy Fen
IE0001873	Derryclogher (Knockboy) Bog
IE0001879	Glanmore Bog
IE0001880	Meenaguse Scragh
IE0001881	Maulagowna Bog
IE0001890	Mullaghanish Bog
IE0001898	Unshin River
IE0001899	Cloonakillina Lough
IE0001912	Glendree Bog
IE0001913	Sonnagh Bog
IE0001919	Glenade Lough
IE0001922	Bellacorick Bog Complex

Site Code	Site Name
IE0001926	East Burren Complex
IE0001932	Mweelrea/Sheeffry/Erriff Complex
IE0001952	Comeragh Mountains
IE0001955	Croaghaun/Slievemore
IE0001957	Boyne Coast and Estuary
IE0001975	Ballyhoorisky Point to Fanad Head
IE0001976	Lough Gill
IE0001992	Tamur Bog
IE0002005	Bellacragher Saltmarsh
IE0002006	Ox Mountains Bogs
IE0002008	Maumturk Mountains
IE0002010	Old Domestic Building (Keevagh)
IE0002012	North Inishowen Coast
IE0002031	The Twelve Bens/Garraun Complex
IE0002032	Boleybrack Mountain
IE0002034	Connemara Bog Complex
IE0002036	Ballyhoura Mountains
IE0002037	Carrigeenamronety Hill
IE0002041	Old Domestic Building, Curraglass Wood
IE0002047	Cloghernagore Bog and Glenveagh National Park
IE0002070	Tralee Bay and Magharees Peninsula, West to Cloghane
IE0002074	Slyne Head Peninsula
IE0002081	Ballinafad
IE0002091	Newhall and Edenvale Complex
IE0002098	Old Domestic Building, Askive Wood
IE0002110	Corliskea/Trien/Cloonfelliv Bog
IE0002111	Kilkieran Bay and Islands
IE0002112	Ballyseedy Wood
IE0002117	Lough Coy
IE0002118	Barnahallia Lough
IE0002119	Lough Nageeron
IE0002120	Lough Bane and Lough Glass
IE0002121	Lough Lene
IE0002122	Wicklow Mountains
IE0002123	Ardmore Head
IE0002124	Bolingbrook Hill
IE0002125	Anglesey Road
IE0002126	Pollagoona Bog
IE0002129	Murvey Machair
IE0002130	Tully Lough
IE0002135	Lough Nageage
IE0002137	Lower River Suir
IE0002141	Mountmellick
IE0002144	Newport River
IE0002147	Lisduff Fen
IE0002157	Newgrove House
IE0002158	Kenmare River
IE0002159	Mulroy Bay

Site Code	Site Name
IE0002161	Long Bank
IE0002162	River Barrow and River Nore
IE0002164	Lough Golagh and Breesy Hill
IE0002165	Lower River Shannon
IE0002170	Blackwater River (Cork/Waterford)
IE0002171	Bandon River
IE0002172	Blasket Islands
IE0002173	Blackwater River (Kerry)
IE0002176	Leannan River
IE0002177	Lough Dahybaun
IE0002179	Towerhill House
IE0002180	Gortacarnaun Wood
IE0002181	Drummin Wood
IE0002185	Slieve Mish Mountains
IE0002187	Drongawn Lough
IE0002189	Farranamanagh Lough
IE0002193	Ireland's Eye
IE0002197	Derrinlough (Cloonkeenleananode) Bog
IE0002199	Ballygar (Aghrane) Bog
IE0002200	Aughrim (Aghrane) Bog
IE0002201	Derragh Bog
IE0002202	Mount Jessop Bog
IE0002203	Girley (Drewstown) Bog
IE0002205	Wooddown Bog
IE0002206	Schoaboy (Sopwell) Bog
IE0002207	Arragh More (Derrybreen) Bog
IE0002213	Glenloughaun Esker
IE0002214	Killeglan Grassland
IE0002236	Island Fen
IE0002241	Lough Derg, North-east Shore
IE0002243	Clare Island Cliffs
IE0002244	Ardrahan Grassland
IE0002245	Old Farm Buildings, Ballymacrogan
IE0002246	Ballycullinan, Old Domestic Building
IE0002247	Toonagh Estate
IE0002249	The Murrough Wetlands
IE0002250	Carrowmore Dunes
IE0002252	Thomastown Quarry
IE0002256	Ballyprior Grassland
IE0002257	Moanour Mountain
IE0002258	Silvermines Mountains West
IE0002259	Tory Island Coast
IE0002261	Magharee Islands
IE0002262	Valencia Harbour/Portmagee Channel
IE0002263	Kerry Head Shoal
IE0002264	Kilkee Reefs
IE0002265	Kingstown Bay
IE0002267	Porcupine Shelf

Site Code	Site Name
IE0002268	Achill Head
IE0002269	Carnsore Point
IE0002274	Wicklow Reef
IE0002278	Southern Canyons
IE0002279	Askeaton Fen Complex
IE0002280	Dunbeacon Shingle
IE0002281	Reen Point Shingle
IE0002283	Rutland Island and Sound
IE0002287	Lough Swilly
IE0002293	Carrowbaun, Newhall and Ballylee Turloughs
IE0002294	Cahermore Turlough
IE0002295	Ballinduff Turlough
IE0002296	Williamstown Turloughs
IE0002298	River Moy
IE0002299	River Boyne and River Blackwater
IE0002301	River Finn
IE0002303	Dunmuckrum Turloughs
IE0002306	Carlingford Shore
IE0002312	Slieve Bernagh Bog
IE0002313	Ballymore Fen
IE0002314	Old Domestic Buildings, Rylane
IE0002315	Glanlough Woods
IE0002316	Ratty River Cave
IE0002317	Cregg House Stables, Crusheen
IE0002318	Knockanira House
IE0002319	Kilkishen House
IE0002320	Kildun Souterrain
IE0002324	Glendine Wood
IE0002327	Belgica Mound Province
IE0002328	Hovland Mound Province
IE0002329	South-west Porcupine Bank
IE0002330	North-west Porcupine Bank
IE0002331	Mouds Bog
IE0002332	Coolrain Bog
IE0002333	Knockacoller Bog
IE0002336	Carn Park Bog
IE0002337	Crosswood Bog
IE0002338	Drumalough Bog
IE0002339	Ballynamona Bog and Corkip Lough
IE0002340	Moneybeg and Clareisland Bogs
IE0002341	Ardagullion Bog
IE0002342	Mount Hevey Bog
IE0002343	Tullaher Lough and Bog
IE0002346	Brown Bog
IE0002347	Camderry Bog
IE0002348	Clooneen Bog
IE0002349	Corbo Bog
IE0002350	Curraghlahanagh Bog

Site Code	Site Name
IE0002351	Moanveanlagh Bog
IE0002352	Monivea Bog
IE0002353	Redwood Bog
IE0002354	Tullaghanrock Bog
IE0002356	Ardgraique Bog
IE0002953	Blackwater Bank
IE0002998	West Connacht Coast
IE0002999	Hempton's Turbot Bank
IE0003000	Rockabill to Dalkey Island
IE0003001	Porcupine Bank Canyon
IE0003002	South-east Rockall Bank
IE0003015	Codling Fault Zone



Appendix B: Special Protection Areas in Ireland

Sites marked * are stated as being sites where the presence of wetlands has contributed to their selection as SPAs.

Site Code	Site Name
IE0004002	Saltee Islands
IE0004003	Puffin Island
IE0004004	Inishkea Islands
IE0004005	Cliffs of Moher
IE0004006	North Bull Island*
IE0004007	Skelligs
IE0004008	Blasket Islands
IE0004009	Lady's Island Lake*
IE0004013	Drumcliff Bay*
IE0004014	Rockabill
IE0004015	Rogerstown Estuary*
IE0004016	Baldoyle Bay*
IE0004017	Mongan Bog
IE0004019	The Raven*
IE0004020	Ballyteige Burrow*
IE0004021	Old Head of Kinsale
IE0004022	Ballycotton Bay*
IE0004023	Ballymacoda Bay*
IE0004024	South Dublin Bay and River Tolka Estuary*
IE0004025	Malahide Estuary*
IE0004026	Dundalk Bay*
IE0004027	Tramore Back Strand*
IE0004028	Blackwater Estuary*
IE0004029	Castlemaine Harbour*
IE0004030	Cork Harbour*
IE0004031	Inner Galway Bay*
IE0004032	Dungarvan Harbour*
IE0004033	Bannow Bay*
IE0004034	Trawbreaga Bay*
IE0004035	Cummeen Strand*
IE0004036	Killala Bay/Moy Estuary*
IE0004037	Blacksod Bay/Broad Haven*
IE0004038	Killarney National Park
IE0004039	Derryveagh and Glendowan Mountains
IE0004040	Wicklow Mountains
IE0004041	Ballyallia Lough*
IE0004042	Lough Corrib*
IE0004043	Lough Derravaragh*
IE0004044	Lough Ennell*
IE0004045	Glen Lough
IE0004046	Lough Iron*
IE0004047	Lough Owel*
IE0004048	Lough Gara
IE0004049	Lough Oughter Complex*

Site Code	Site Name
IE0004050	Lough Arrow*
IE0004051	Lough Carra
IE0004052	Carrowmore Lake
IE0004056	Lough Cutra
IE0004057	Lough Derg (Donegal)
IE0004058	Lough Derg (Shannon)*
IE0004060	Lough Fern*
IE0004061	Lough Kinale and Derragh Lough*
IE0004062	Lough Mask*
IE0004063	Poulaphouca Reservoir SPA
IE0004064	Lough Ree*
IE0004065	Lough Sheelin*
IE0004066	The Bull and The Cow Rocks
IE0004068	Inishmurray
IE0004069	Lambay Island
IE0004072	Stags of Broad Haven
IE0004073	Tory Island
IE0004074	Illanmaster
IE0004075	Lough Swilly*
IE0004076	Wexford Harbour and Slobs*
IE0004077	River Shannon and River Fergus Estuaries*
IE0004078	Carlingford Lough*
IE0004080	Boyne Estuary*
IE0004081	Clonakilty Bay*
IE0004082	Greens Isle
IE0004083	Inishbofin, Inishdooley and Inishbeg
IE0004084	Inishglora and Inishkeeragh
IE0004086	River Little Brosna Callows*
IE0004087	Lough Foyle*
IE0004089	Rahasane Turlough*
IE0004090	Sheskinmore Lough
IE0004091	Stabannan-Braganstown
IE0004092	Tacumshin Lake*
IE0004093	Termoncarragh Lake and Annagh Machair*
IE0004094	Blackwater Callows*
IE0004095	Kilcolman Bog*
IE0004096	Middle Shannon Callows*
IE0004097	River Suck Callows*
IE0004098	Owenduff/Nephrin Complex
IE0004099	Pettigo Plateau Nature Reserve
IE0004100	Inishtrahull
IE0004101	Ballykenny-Fisherstown Bog
IE0004102	Garriskil Bog
IE0004103	All Saints Bog
IE0004105	Bellanagare Bog
IE0004107	Coole-Garryland
IE0004108	Eirk Bog
IE0004109	The Gearagh*

Site Code	Site Name
IE0004110	Lough Nillan Bog
IE0004111	Duvillaun Islands
IE0004113	Howth Head Coast
IE0004114	Illeannonearaun
IE0004115	Inishduff
IE0004116	Inishkeel
IE0004117	Ireland's Eye
IE0004118	Keeragh Islands
IE0004119	Loop Head
IE0004120	Rathlin O'Birne Island
IE0004121	Roaninish
IE0004122	Skerries Islands
IE0004124	Sovereign Islands
IE0004125	Magharee Islands
IE0004127	Wicklow Head
IE0004129	Ballysadare Bay*
IE0004132	Illancrone and Inishkeeragh
IE0004133	Aughris Head
IE0004134	Lough Rea*
IE0004135	Ardboline Island and Horse Island
IE0004136	Clare Island
IE0004137	Dovegrove Callows
IE0004139	Lough Croan Turlough*
IE0004140	Four Roads Turlough*
IE0004142	Cregganna Marsh
IE0004143	Cahore Marshes*
IE0004144	High Island, Inishshark and Davillaun
IE0004145	Durnesh Lough
IE0004146	Malin Head
IE0004148	Fanad Head
IE0004149	Falcarragh to Meenlaragh
IE0004150	West Donegal Coast
IE0004151	Donegal Bay*
IE0004152	Inishmore
IE0004153	Dingle Peninsula
IE0004154	Iveragh Peninsula
IE0004155	Beara Peninsula
IE0004156	Sheep's Head to Toe Head SPA
IE0004158	River Nanny Estuary and Shore*
IE0004159	Slyne Head to Ardmore Point Islands
IE0004160	Slieve Bloom Mountains
IE0004161	Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle
IE0004162	Mullaghanish to Musheramore Mountains
IE0004165	Slievefelim to Silvermines Mountains
IE0004167	Slieve Beagh
IE0004168	Slieve Aughty Mountains
IE0004170	Cruagh Island
IE0004172	Dalkey Islands

Site Code	Site Name
IE0004175	Deenish Island and Scariff Island
IE0004177	Bills Rocks
IE0004181	Connemara Bog Complex
IE0004182	Mid-Clare Coast*
IE0004186	The Murrough*
IE0004187	Sligo/Leitrim Uplands
IE0004188	Tralee Bay Complex*
IE0004189	Kerry Head
IE0004190	Galley Head to Duneen Point
IE0004191	Seven Heads
IE0004192	Helvick Head to Ballyquin
IE0004193	Mid-Waterford Coast
IE0004194	Horn Head to Fanad Head
IE0004212	Cross Lough (Killadoon)
IE0004219	Courtmacsherry Bay
IE0004220	Corofin Wetlands*
IE0004221	Illeannanooon
IE0004227	Mullet Peninsula
IE0004228	Lough Conn and Lough Cullin*
IE0004230	West Donegal Islands
IE0004231	Inishbofin, Omev Island and Turbot Island
IE0004232	River Boyne and River Blackwater
IE0004233	River Nore
IE0004234	Ballintemple and Ballygilgan
IE0004235	Doogort Machair
IE0004236	North-west Irish Sea

Appendix C: European Sites in Northern Ireland

Special Areas of Conservation	
Site Code	Site Name
UK0030318	Aughnadarragh Lough
UK0030319	Ballykilbeg
UK0016599	Ballynahone Bog
UK0030083	Banagher Glen
UK0030084	Bann Estuary
UK0030089	Binevenagh
UK0016609	Black Bog
UK0030097	Breen Wood
UK0030110	Carn-Glenshane Pass
UK0030116	Cladagh (Swanlinbar) River
UK0030321	Cranny Bogs
UK0016603	Cuilcagh Mountain
UK0030322	Curran Bog
UK0030321	Dead Island Bog
UK0030324	Deroran Bog
UK0016620	Derryleckagh
UK0016615	Eastern Mourne
UK0016611	Fairy Water Bogs
UK0030068	Fardrum and Roosky Turloughs
UK0016606	Garron Plateau
UK0016610	Garry Bog
UK0030169	Hollymount
UK0030045	Largalinny
UK0030180	Lecale Fens
UK0030047	Lough Melvin
UK0016621	Magheraveely Marl Loughs
UK0016613	Magilligan
UK0030199	Main Valley Bogs
UK0016619	Monawilkin
UK0030211	Moneygal Bog
UK0030212	Moninea Bog
UK0030214	Montiaghs Moss
UK0016612	Murlough
UK0030224	North Antrim Coast
UK0030399	North Channel
UK0030233	Owenkillew River
UK0030236	Peatlands Park
UK0016607	Pettigoe Plateau
UK0030055	Rathlin Island
UK0030244	Rea's Wood and Farr's Bay
UK0030365	Red Bay SAC
UK0030361	River Faughan and Tributaries
UK0030320	River Foyle and Tributaries

Special Areas of Conservation	
Site Code	Site Name
UK0030360	River Roe and Tributaries
UK0030268	Rostrevor Wood
UK0030383	Skerries and Causeway
UK0016622	Slieve Beagh
UK0030277	Slieve Gullion
UK0016618	Strangford Lough
UK0016608	Teal Lough
UK0030384	The Maidens
UK0030325	Tonnagh Beg Bog
UK0030326	Tully Bog
UK0030291	Turmennan
UK0030296	Upper Ballinderry River
UK0016614	Upper Lough Erne
UK0030300	West Fermanagh Scarplands
UK0030303	Wolf Island Bog

Special Protection Areas	
Site Code	Site Name
UK9020301	Antrim Hills
UK9020290	Belfast Lough Open Water
UK9020101	Belfast Lough
UK9020161	Carlingford Lough
UK9020291	Copeland Island
UK9020291	Killough Bay
UK9020042	Larne Lough
UK9020031	Lough Foyle
UK9020091	Lough Neagh and Lough Beg
UK9020271	Outer Ards
UK9020051	Pettigoe Plateau
UK9020011	Rathlin Island
UK9020021	Sheep Island
UK9020302	Slieve Beagh – Mullaghfad – Lisnaskea
UK9020111	Strangford Lough
UK9020071	Upper Lough Erne
-	East Coast Marine*
-	Carlingford Marine*

*East Coast Marine and Carlingford Marine are proposed SPAs and UK site codes have not been confirmed. The sites were not included in the original Screening Report.

Appendix B Consultation Responses

Responses from the first consultation phase

Organisation	Responses Relating to the AA
Bord Iascaigh Mhara (BIM)	No comments regarding the screening report.
Commission for Regulation of Utilities (CRU)	No comments regarding the screening report.
Department of Agriculture, Food and the Marine	No comments regarding the screening report.
Department of Housing, Local Government and Heritage: Archaeology	No comments regarding the screening report.
Department of the Environment, Climate and Communications: Geological Survey	No specific comments regarding the screening report. Recommended various databases including groundwater maps
Eastern and Midland Regional Assembly	No comments regarding the screening report.
Environment Protection Agency	All recommendations from the SEA and AA processes, including mitigation measures and monitoring proposals, should be integrated into the plan.
Inland Fisheries Ireland / Iascach Intíre Éireann	<p>Some general issues and likely significant effects that IFI has highlighted in respect of the interaction between water services planning and the inland fisheries resource in the past and which are now rightly identified in the SEA scoping and AA Screening reports for the WSSP 2050 include:</p> <p>Species Mortality <i>Species mortality may occur during infrastructure construction activities or as a result in changes to water quality. Mortality may also occur as a result of the loss of prey species or through the fragmentation of habitats resulting in barriers to species movement.</i></p> <p>Habitat Loss/Fragmentation and Barriers to Movement <i>New infrastructure may result in the loss and/or fragmentation of habitat (including habitat that supports qualifying interests). It may also create barriers to movement of species, such as salmon, resulting in loss or changes to populations. These impacts may also affect the prey species of qualifying interests. New or increased water abstraction may also result in the loss and/or fragmentation of habitats.</i></p> <p>Disturbance <i>The construction of new infrastructure may lead to the disturbance of species altering their populations and/or distribution. Disturbance may take the form of, for example, noise and vibration, lighting, and movement. This disturbance could affect terrestrial or aquatic animal species across a range of habitats and locations. Depending on the type of infrastructure, disturbance could be short-term or long-term.</i></p> <p>Changes in Water Quality <i>Changes in water quality may occur for a variety of reasons including spillages and run-off, sedimentation, and wastewater discharges. These changes may occur during construction of new infrastructure or because of changes in water flows (pathways). Changes in water quality may</i></p>

Organisation	Responses Relating to the AA
	<p><i>result in the mortality of qualifying species and/or their prey. It may also result in the loss of qualifying or supporting habitats.</i></p> <p>Changes in Hydrology <i>Hydrological changes may directly affect aquatic habitats changing the ecological functionality of systems and the species they support.</i></p> <p>Hydrological <i>changes may also alter the distribution of habitats thus affecting the distribution and population of species. Hydrological changes may result from new or enhanced abstractions, or from new infrastructure.</i></p> <p>Transfer of Non-Native Species <i>The distribution and transfer of water and the collection, treatment and discharge of wastewater may lead to the transfer of non-native species. If invasive, these species may alter habitats or displace species. These changes may affect directly qualifying habitats and species or the ecological functionality of systems.</i></p>
Meath County Council	No comments regarding the screening report.
NI – Department for Communities: Historic Environment Division	No comments regarding the screening report.
NI – Northern Ireland Environment Agency (NIEA): Natural Environment Division (NED) response	<p>NED welcome the recognition of the potential for transboundary effects on NI designated sites within the AA screening document and that these will be assessed within the AA. NED welcome the opportunity to comment on this as it is developed.</p> <p>Please note following the decision of the United Kingdom to leave the European Union, the collective term of “Natura 2000” sites, the network of European protected sites, are now known as “National Site Network” sites within the United Kingdom, including Northern Ireland.</p> <p>It may be worth including in your considerations the following:</p> <ul style="list-style-type: none"> • The Wildlife (NI) Order 1985 (as amended) • Wildlife and Natural Environment Act (NI) 2011 • The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended) • The Environment (NI) Order 2002 • The Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2017 • The Strategic Planning Policy Statement (SPPS) for Northern Ireland • Planning Policy Statements (PPS – in particular PPS2). It should be noted that the PPS’s will be superseded by Local Development Plans when they are adopted. • Biodiversity Strategy for NI to 2020 https://www.daera-ni.gov.uk/publications/biodiversity-strategy-northern-ireland-2020-0 • Draft Environment Strategy <p>The Draft NI peatland policy: https://www.daera-ni.gov.uk/consultations/ni-peatland-strategy-consultation.</p>

Organisation	Responses Relating to the AA
Inland Fisheries Response	<ul style="list-style-type: none"> • The Draft Green Growth Strategy Consultation on the draft Green Growth Strategy for Northern Ireland Department of Agriculture, Environment and Rural Affairs (daera-ni.gov.uk) • Northern Ireland Energy Strategy 2050 Northern Ireland Energy Strategy 2050 Department for the Economy (economy-ni.gov.uk) <p>A number of useful information sources that highlight the current state of the environment in Northern Ireland at a regional level and which could be referenced are:</p> <ul style="list-style-type: none"> • Northern Ireland State of the Environment Reports: https://www.daera-ni.gov.uk/publications/state-environment-report-2013 • Northern Ireland Environmental Statistics Reports: https://www.daera-ni.gov.uk/articles/northern-ireland-environmental-statistics-report <p>Other relevant web-links are;</p> <ul style="list-style-type: none"> • Designated Scientific Sites: www.daera-ni.gov.uk/landing-pages/protected-areas • Regional Landscape Character Map viewer: https://www.daera-ni.gov.uk/services/regional-landscape-character-areas-map-viewer <p>DAERA have a map browser for NI protected sites and known priority habitat: www.daera-ni.gov.uk/services/natural-environment-map-viewer</p> <p>Our natural environment datasets are available at the link below: www.daera-ni.gov.uk/articles/download-digital-datasets</p> <p>Appropriate Assessments should refer to the status of habitats and species in the relevant reports available on the JNCC website as follows: UK Article 17 report for the Habitats Directive https://jncc.gov.uk/our-work/article-17-habitats-directive-report-2019/ and the UK Article 12 report for the Birds Directive https://jncc.gov.uk/our-work/european-reporting/#birds-directive-reporting</p> <p>In relation to transboundary catchments Inland fisheries would recommend that any SEA/AA be cognisant of the North Atlantic Salmon Conservation Organisation (NASCO), Convention for the Conservation of Salmon in the North Atlantic Implementation Plan for the period 2019 – 2024, this an international commitment for Northern Ireland (as part of the UK; ROI through the EU is also a signatory) and should be included in any policy has the potential to impact this species and the goals of this plan.</p> <ul style="list-style-type: none"> • In Section 2.1, we advise using the DAERA Marine Map Viewer • In Section 3.3.1 – Issue 5 – Environment and Biodiversity Crises, we advise ensuring that marine environments and marine species are also considered.
Marine Conservation Branch Response	

Organisation	Responses Relating to the AA
	<ul style="list-style-type: none"> • In Table 4.1, there are 18 SPAs in Northern Ireland (the East Coast Marine pSPA and Carlingford Marine pSPA also need to be considered). • In Section 4.4, we advise that changes in hydrology can change the movement of sediment, therefore, potentially change coastal processes which could impact reliant habitats and species. In addition, we advise also considering how the introduction and spread of invasive non-native species can be prevented/minimised. Furthermore, we advise that extreme noise disturbance can also cause species mortality. • In Section 4.5, we advise also considering the Living With Water Programme – Derry/Londonderry Sustainable Drainage Infrastructure Plan. • In Section 5, we agree with the following statement: ‘At this stage of the AA process all European Sites across Ireland and Northern Ireland are screened in.’ • In Appendix C, we advise including East Coast Marine pSPA and Carlingford Marine pSPA.
The Water Forum / An Fórum Uisce	No comments regarding the screening report.



Appendix C Northern Ireland Ramsar Sites

List of Ramsar sites in Northern Ireland. All sites are at least partly associated with either an SAC or an SPA or both.

Site Code	Site Name	Associated SAC/SPA
UK12001	Ballynahone Bog	Ballynahone Bog SAC
UK12002	Belfast Lough	Belfast Lough SPA
UK12003	Black Bog	Black Bog SAC
UK12004	Carlingford Lough	Carlingford Lough SPA
UK12005	Cuilcagh Mountain	Cuilcagh Mountain SAC
UK12006	Derryleckagh (proposed)	Derryleckagh SAC
UK12007	Dundrum Bay (proposed)	Murlough SAC ¹
UK12008	Fairy Water Bogs	Fairy Water Bogs SAC
UK12009	Fardrum and Roosky Turloughs	Fardrum and Roosky Turloughs SAC
UK12010	Garron Plateau	Garron Plateau SAC Antrim Hills SPA
UK12011	Garry Bog	Garry Bog SAC
UK12012	Killough Bay	Killough Bay SPA
UK12013	Larne Lough	Larne Lough SPA
UK12014	Lough Foyle	Lough Foyle SPA Magilligan SAC
UK12016	Lough Neagh and Lough Beg	Lough Neagh and Lough Beg SPA
UK12017	Magheraveely Marl Loughs	Magheraveely Marl Loughs SAC
UK12018	Outer Ards	North Channel SAC Outer Ards SPA
UK12019	Pettigoe Plateau	Pettigoe Plateau SAC Pettigoe Plateau SPA
UK12020	Slieve Beagh	Slieve Beagh SAC Slieve Beagh-Mullaghfad-Lisnaskea SPA
UK12021	Strangford Lough	Strangford Lough SAC Strangford Lough SPA
UK12022	Teal Lough	Teal Lough SAC
UK12023	Turmennan Lough	Turmennan SAC
UK12024	Upper Lough Erne	Upper Lough Erne SAC Upper Lough Erne SPA

¹ Unconfirmed due to lack of site information but likely.